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In the
Supreme Court of the United States.

OCTOBER TERM, 1941.

No. 332.

THE WILLIAMS MANUFACTURING COMPANY,
Defendant-Petitioner,

v.

UNITED SHOE MACHINERY CORPORATION,
Plaintiff-Respondent.

BRIEF FOR PLAINTIFF-RESPONDENT.

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BRIEF FOR PLAINTIFF-RESPONDENT.

The decision of the Circuit Court of Appeals for the Sixth Circuit herein is reported at 121 Fed. (2d) 273. The decision of the District Court is reported at 29 Fed. Supp. 1015. The case is before this court pursuant to a writ of certiorari granted under authority conferred by Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925.

The patent in suit, McFeely No. 1,558,737, issued October 27, 1925 (II, 2), is for an automatic heel seat laster useful in the manufacture of shoes. The machine of the patent, as manufactured by the plaintiff, has been used extensively, not only in this country, but also in the principal countries of Europe and South America (D.C. Opinion, I, 483; also I, 124, 145).

Emphasis in this brief ours unless otherwise indicated.

The District Court for the Southern District of Ohio, Western Division (Druffel, J.) (I, 477-486;) and the Circuit Court of Appeals for the Sixth Circuit, on appeal (I, 501-513), held the patent valid as to the claims in suit (claims 6, 23, 42, 85 and 91), and infringed by defendant's use of four so-called "Calzera" automatic heel seat lasters manufactured by Moenus Maschinenfabrik A/G of Frankfort A/M Germany and imported by defendant in 1933-4 (Finding 2, I, 478).

The manufacturer of these lasters was familiar with the patent in suit, had seen plaintiff's commercial machine made under it, and in the infringing construction copied the plaintiff's commercial machine made under the patent even in minor details not shown in the patent.

As the Court of Appeals said (Opinion, I, 505):

"It seems reasonably clear, from the general appearance of the accused machines, and as they are depicted and described in the Moenus catalog, and from the evidence of the defendant's witness Kath, a mechanical engineer engaged on patent work for the Moenus Company, who came from Germany to help in the preparation of the trial and whose duty it was to study shoe machinery patents including those granted by United States, and who saw one of the McFeely machines in Germany and was familiar with the patent drawings and specifications, that the Moenus machines are copies of the commercial construction of the plaintiff. They followed this construction even in minor detail not shown in the patent, and the important results claimed for it by the inventor over machines of the prior art are enthusiastically proclaimed in the Moenus catalog."

*For the evidence on this matter see I, 392, 400, 401.

Pertinent portions of the booklet issued by the Moenus Company describing this "Calzera" heel seat laster, are reproduced in the record at II, 496-500 incl.*

THE ISSUES RAISED BY DEFENDANT.

Defendant's brief (p. 2) says that

"The primary issue is extension of monopoly by re-patenting an old combination to redominate a trade for another seventeen years, contrary to the principles announced by this Court in *Bassick v. Hollingshead*, 298 Fed. 415, and *Lincoln v. Stewart Warner Corp.*, 303 U.S. 545."

The patent of which it is said that the patent in suit is a "repatenting" is McFeely patent No. 1,129,881 (II, 266)

*This document describes the performance of this machine, as compared with prior art methods.

It says (II, 496) that "the result is astonishing".

After enumerating the "astonishing" results, it asks "Are these not long-wanted advantages?" (II, 496).

And on the view of the machine which appears at II, 498, the booklet says:

"But a few years ago a problem—today a reality!"

The features of this machine which this booklet lists as the "astonishing" "long-wanted advantages" are the advantages obtained by the copying of plaintiff's laster, namely, large increase in production as compared with prior art machines, higher quality work and adaptability for use "for any size and kind of shoes, from the smallest children's size up to the largest men's." (II, 496-499).

Because of the

"possibility to force and nail the entire seat in one operation", the machine, the circular says,

"demands respect and surprise. There is no doubt that the 'Calzera' is the joy and pride of every factory." (II, 500).

which issued on March 2, 1915 and, therefore, expired on March 2, 1932.*

Defendant asserts that the McFeely patent in suit shows the same machine which was shown in the first McFeely patent, and that the claims in suit purport to cover this old machine with three "adjustments added", as to which "adjustments" it says (p. 31) that

"All three of these adjustments were found in the first McFeely patent."

It is, of course, plain on the face of the matter that these statements cannot be correct. If the earlier patent showed everything that is shown in the patent in suit, then, of course, the Patent Office (which cited the first McFeely patent during its consideration of the application for the patent in suit, C.C.A. Opinion, I, 508) would not have allowed the claims in suit. Furthermore, the defendant and the manufacturer of the defendant's machines are free, and have been free for ten years, to use any structure disclosed in the expired patent, without liability to any charge of infringement.

We judge that defendant's position is, rather, as amplified in its brief at p. 2 and elsewhere, that the patent in suit shows the same basic mechanism as that of the expired patent, modified only "by the substitution of mechanical details, already old in the art", and that the patent in suit "merely aggregates old adjusting features with an old combination".

These issues have been decided adversely to defendant's

*The fact that the earlier patent issued to the same inventor does not affect the legal situation. If defendant's assertion that the patent in suit purports to cover merely the same subject matter covered by the expired patent were correct, the patent in suit would be invalid whether the earlier patent had issued to McFeely or to anyone else.

contention by both the District Court and the Court of Appeals.

The District Court found that the features of construction defined in all of the claims in suit were new and useful, not found in the first McFeely patent or elsewhere in the art, and that they involved invention over the first McFeely patent and the rest of the prior art (I, 481, 482, Findings 25, 26, 27, 29, 35).

These were the findings of a trial court which listened to testimony for about ten days, and which during the course of the trial witnessed the operation of plaintiff's machine in factory production and also the operation of the prior art "bed" lasting machines on which defendant relies (I, 51).

Affirming the District Court decision regarding this patent, the Court of Appeals said (I, 511):

"But to reduce the second McFeely patent to a mere aggregation of tacker and the old form of bed laster, or to consider it as merely the combination of the first McFeely patent and conventional expedients for adjustment, is to ignore matters of substance. . . . Taken together, the improvements in the second McFeely machine gave a new result and a new unitary mode of operation of the entire machine. There is here much more than mere improvement in quality or quantity of product due to the independent functioning of an improved element, as in *Bassick v. Hollingshead*, 298 U.S. 415, or *Kodel Electric Co. v. Warren Clock Co.*, 62 Fed. (2d) 692 (C.C.A. 6th).

"The patent in suit is not merely the aggregate of laster and tacker, and the disclosed improvements upon prior art are not limited to the addition of adjustability."

HEEL SEAT LASTING.

At that stage of shoe manufacture when a partially completed shoe is ready for the operation of "heel seat lasting", the shoe upper, with its lining and counter, has been placed on a wooden last*, an insole has been tacked to the last, and the upstanding edges of the upper at the *toe* and *shank* of the shoe have already been "lasted" by flattening them down and tacking them to the insole. The lasting of the *heel seat*, which must now be done, involves conforming the upper materials snugly to the contour of the heel end of the last and fastening them there by tacks. The folding and flattening of the projecting marginal portions of the upper, counter and lining (these marginal portions are termed the "*lasting allowance*") is accomplished by horizontally moving plates called "*wipers*", one on each side of the heel, which are moved inwardly over the heel seat and "wipe" or flatten these projecting marginal portions down on the heel portion of the insole, and then tacks are driven through them into the insole so as to fasten the upper materials in lasted position about the heel seat.

The heel seat-lasting operation is a delicate one; there must be an accurate fit when the heel of the shoe is subsequently applied, and there must not be any looseness in the upper material. A single "wiping" operation is ordinarily not sufficient. There must ordinarily be a first wiping operation which "breaks down" the upper materials, and which is performed with the wipers somewhat above the plane of the insole, and then another wiping operation, with the wipers acting closely along the face of the insole, which "irons" the materials flat on the heel seat.

The condition of a shoe in the stage of manufacture when it is ready for heel seat lasting is shown by Plffs.

*A last is a wooden form of the shape of the foot which the shoe is intended to fit.

Ex. 5F. The condition of the shoe after the heel seat lasting operation has been performed is shown by Plffs. Ex. 5G.*

HEEL SEAT LASTING BEFORE McFEELY—THE "BED" MACHINES.

Prior to the time when McFeely entered the field, the prevailing method of heel seat lasting involved the use of so-called "bed" machines to perform the wiping operations, and then tacking by hand. Examples of "bed" machines are shown in the Lombard, Eaton, Brock and Pym patents mentioned in defendant's brief at pp. 25, 26.

Operation of a "bed" machine (Duplessis, I, 38-40) involves repeated manipulations of levers, foot treadles and other appliances by the operator in order to bring the shoe parts into proper relationship to the insole and last; it is a time-consuming operation; and its results are non-uniform, for they depend largely upon the skill and experience of the operator, upon whether he is tired or not, for the operation is "very tiring to the operator", and even upon his weight, since upon this depends the force exerted by the foot treadle (I, 40).

The District Court, which during the trial witnessed the operation of "bed" machines (I, 51), found as follows: ,

"The machine shown in the McFeely patent in suit is the first automatic heel seat laster which ever went into commercial use. Prior to the advent of this machine, heel seat lasting had been done principally on so-called 'hand method' or 'bed' machines which involved repeated manipulations of levers, foot treadles and various other appliances by the operator, and was a time-consuming and laborious operation, with non-uniform results." (I, 478, Finding 8).

*The operation of heel seat lasting is described in the Court of Appeals opinion at I, 502, 503.

And after this time-consuming and laborious operation had been performed in order to prepare the shoe for the tacking operation, the operator had to drive the tacks by hand.

PERFORMANCE OF THE HEEL SEAT LASTER OF THE PATENT IN SUIT.

As contrasted with the prior "hand method" or "bed" machine operation, the District Court found (Opinion, I, 483) that with the automatic heel seat laster of the McFeely patent in suit

"the heel seat lasting of shoes is accomplished four times as fast as by the prior hand method with a consequent reduction in cost; that the workmanship of the heel seat of a shoe lasted by the McFeely machine is far superior in that all are uniform, whereas when done by hand the workmanship varies according to the skill of the operator, which also resulted in a much larger percentage of damaged shoes than is now the case when the heel seat is lasted by the machine."

By this machine the successive wiping strokes required to "break down" the shoe upper and the subsequent operation of driving the tacks, are all done in a fraction of a second.

The Court of Appeals, which, like the District Court, witnessed the operation of the laster of the patent in suit, said, after describing the sequence of operations which take place during the operation of the machine (I, 503):

"While these operations require extended description the entire sequence is completed in the fraction of a second and too swiftly for the eye to follow."

McFEELY'S FIRST MACHINE—McFEELY EXPIRED PATENT

1,129,881.

In the machine shown in his expired patent 1,129,881 (II, 266) McFeely undertook to provide an automatic heel seat laster, and since a lasting machine, in order to be commercially practicable; must be capable of operating upon a wide range of different sizes of shoes, he provided mechanisms which were intended to make the machine adaptable for use on a range of shoe sizes.

He produced a machine which would work successfully upon certain particular sizes of shoes, but which "*proved incapable of operating satisfactorily upon a range of sizes large enough to adapt it for commercial operation in the ordinary shoe factory*" (I, 476).*

The history of the one machine which was built in accordance with the first McFeely patent is stated by the Court of Appeals as follows (Opinion I, 510):

"The first McFeely patent contributed little to the art. But one machine was ever built in accordance with its disclosures and this was sent by the appellee to the Victor Shoe Company for test in the lasting of heel seats under commercial conditions, subject to an arrangement by which no charge should be made to the Victor Company for the work done on the machine, and that any shoes spoiled in its operation should be paid for by the appellee. Although the machine successfully lasted shoes of specific sizes, *it proved inca-*

*Defendant's brief says (p. 6) that plaintiff's employees filed affidavits in the Patent Office saying that the machine of the first McFeely patent had been successfully and commercially used "on various sizes of shoes". This is incorrect, as defendant's own quotation from the file wrapper (Br., p. 56) shows. What was said was that this machine had been used in the manufacture of "many pairs of shoes"—not "various sizes of shoes".

pable of operating satisfactorily upon a range of sizes large enough to adapt it for commercial operation in the ordinary shoe factory, and after it had been tested for a period it was returned to the manufacturer, was dismantled, and no other similar machine was ever built."

THE TACKER-WIPER MECHANISM OF THE EXPIRED McFEELY PATENT.

It was, of course, fundamental to McFeely's purpose—the production of an automatic heel seat laster—that the tacking operation should be done automatically, as well as the “wiping” operations, and it was the presence of automatic tacker mechanisms on the machine which gave rise to the difficulty in making the machine operative over a range of shoe sizes.

It was easy enough to provide adjustments for the wipers which would allow the wipers to be adjusted for different sizes of shoes. These could be moved by a preliminary adjustment, made before the machine was operated, to the proper position according to the size of the shoe. Such wiper adjustment mechanism had been provided in the old bed lasters as exemplified in the Lombard, Eaton and Brock patents cited in defendant's brief at pp. 25, 26.

But the bed lasters did not provide any tackers and gave no guidance as to how to deal with a machine of which automatic tackers were an essential part.

The tacks must be driven through the “lasting allowance” while the wipers are holding the lasting allowance in place, and at the proper distance from the edge of the heel. *There is, therefore, a particular position, with reference to the heel of the shoe, as well as with reference to the wipers, which the tackers must occupy at the time when they are called upon to do their work. If the heel is a small one, this proper position will be different in space from what it is if the heel is a large one.*

In the bed machines, where the tacks are driven by hand, this of course presents no difficulty; but in an automatic laster, where both wiping and tacking are effected through power-driven parts which have movements of fixed extent in each cycle of operations, the problem of adapting the machine for operating upon a range of sizes presented a real difficulty.

* McFeely, in the machine shown in his first patent, *attempted* to deal with this difficulty by providing for movements of the tackers and wipers such that both wipers and tackers would, during the power movement of the machine, *automatically position themselves properly*, whatever the size of the shoe being operated upon.

This he undertook to do by attaching small parts called "feelers" to the tackers, which feelers, by contacting with the shoe as the tackers and wipers moved inwardly during the power stroke of the machine, would stop any further forward movement of the tackers, supposedly leaving them in the proper position to drive their tacks whatever the size of the shoe, and would then, when the inward movement of the tackers had ceased, cause the wipers to retract, in order to allow the tacks to be driven without interference from the wiper plates.

This mechanism is described in the testimony of Willhauck at Qs. 111-127, I, 411-417 and is illustrated by a model of the mechanism of this expired patent in evidence as Plffs. Ex. 35. It is also explained in detail in the Appendix hereto, p. 41.

This mechanism not only involved highly complicated, and, therefore, expensive and delicate parts, but it also had serious practical defects, as pointed out in the testimony of Willhauck (I, 418, 420).

Retraction of the wipers just before the tacks are driven tended to give a poorly lasted heel, because it tended to pull

the upper materials, which had just been wiped in over the insole, back off the insole again and away from the last (I, 418). In withdrawing, the wipers *tended to undo the work which they did when advancing.**

And, because the extent of the retractive movement of the wipers was indeterminate, depending upon the stage in the power stroke at which the "feelers" contacted the shoe, the wipers might, with some shoe sizes, be withdrawn completely from the heel seat before the tacks were driven, while, in other cases, they might fail to be retracted far enough to get out of the way of the tackers, with the result that the tacks could not be driven into the shoe (Qs. 133-134, I, 419-420).

Thus the machine could not operate successfully except with certain particular shoe sizes.

The District Court witnessed the operation of a model of the mechanism of the expired patent (Plff's. Ex. 35), and understood its defects.

The Court found (Finding 29, I, 481) that

"The, earlier McFeely patent No. 1,129,881 discloses a machine in which, during the power stroke, after certain 'feelers' or stops on the tackers contact the shoe or the heel band, the wiper plates are withdrawn during the rest of the power stroke of the machine."

And, as to the consequences which resulted from this arrangement, the Court said (Opinion, I, 483):

*Defendant's brief (pp. 13, 14) asserts that this dragging back of the leather was avoided by depressing the shoe, and defendant purports to support this assertion by a quotation from the patent. Defendant has, however, either misunderstood or ignored the difficulty here involved. The objectionable dragging back of the leather takes place *before the tacks are driven* (D.C. Opinion, I, 483). But the depressing of the shoe which is asserted by defendant to avoid this objection does not take place until "*after the tacks are driven*" (first McFeely patent, p. 6, lines 36-37, II, 288). At this point in the operation of the machine the damage has already been done and nothing can remedy it.

"the earlier McFeely patent lacked, so far as it relates to Claims 6 and 85, certain elements which prevented it from being commercially successful; that is to say, among others, it would not permit of a successful operation upon a range of shoe sizes; the operation of the tackers and wipers could not be controlled with accuracy, or in other words, adjusted as are the tackers and wipers in the machine covered by the patent in suit; and also, immediately before the tacking movement the wipers would be retracted partly to permit of the tacking and in so doing have a tendency to pull the upper from the insole, which would tend in some instances to and in many operations did make an imperfect job, if not damage the shoe. This was overcome in the machine covered by the patent in suit by the wipers moving in toward the shoe, holding the upper in place rather than pulling the upper away from the last, prior to the tacking as in the earlier McFeely patent."

THE TACKER-WIPER MECHANISM OF THE PATENT IN SUIT (CLAIMS 6 AND 85).

In the machine of the patent in suit McFeely provided a new form of tacker-wiper mechanism which obviated the difficulties experienced in the tacker-wiper mechanism of his previous machine; and it is to this different and successful tacker-wiper mechanism (which defendant has found it necessary to copy, although quite free to use the tacker-wiper mechanism of the expired patent) that claims 6 and 85 of the patent in suit are directed.

What McFeely did in the machine of the patent in suit as regards tacker-wiper mechanism was this; (a) he so interconnected the tackers and the wipers that *the tackers participate in all movements of the wipers*, and he therefore obtained and preserved at all times a fixed and proper

relationship in position of the tackers with reference to the margin of the wipers; and (b) he combined this with mechanism by which a preliminary adjustment of the positions of the wipers, according to the size of the heel and according to the lasting allowance of the upper of the shoe to be lasted, might be made.*

As a result of this arrangement, since the tackers participate in all movements of the wipers both in the preliminary adjustment and in the power stroke of the machine, the tackers are always at a proper position with reference to the edges of the wipers, so as to drive the tacks at the proper place, whatever the size of the heel being operated upon may be, and whatever the width of the lasting allowance of the shoe upper.

Thus McFeely, for the first time, provided, as far as the tackers and wipers are concerned, a practicable machine capable of successful commercial use on the range of shoe sizes upon which such a machine must work in the ordinary shoe factory.

The "tacker-wiper" claims in suit state clearly and succinctly the new combination of elements which McFeely invented. These claims read as follows:

"6. A machine of the class described having, in combination, end lasting wiper plates for closing over a last bottom, manually operable means determinately to adjust the positions of the wiper plates to initially position the wiper plates to act on the marginal portions at the end of a shoe upper mounted on the last, means to effect bodily and swinging movement of the wiper plates to wipe said marginal portions over the bottom of the last into position to be fastened on the bottom of the last, and tacking units co-operating with the wiper plates and having means to maintain

*The tacker-wiper mechanism of the patent in suit is more fully explained in the Appendix hereto (p. 40).

them in predetermined relation to the wiper plates in all positions of adjustment of said plates.

"85. In a machine of the class described, the combination with last and shoe positioning means, of end embracing wipers, means for effecting a preliminary adjustment of the wipers to the contour of the shoe, additional power means for subsequently operating the wipers, and tackers connected to the wipers for preliminary adjustment with them and for power effected movement with the wipers subsequently over the shoe."

DEFENDANT'S ARGUMENT FOR WANT OF INVENTION.

Defendant argues with reference to this aspect of the case that the arrangement of tacker-wiper mechanism described in the claims was obvious in view of the fact that previous bed machines had contained mechanism for making a preliminary adjustment of the wipers according to the size of the shoe.

The argument entirely overlooks the fact that in these prior bed machines *there were no tackers to be reckoned with, and that it was the presence of the tackers and the problem of how to insure that the tackers would drive their tacks at the right place regardless of shoe size that gave rise to the whole problem (see p. 10, supra).*

The argument also erroneously assumes that all that McFeely did in this patent as regards the tacker-wiper mechanism was to add to his previous machine a mechanism for the preliminary adjustment of the wipers. The fact is, to the contrary, that the invention did not consist in merely adding a preliminary adjustment for the wipers, but *in combining, with such adjustment means, connections between tackers and wipers such as to cause the tackers to move with the wipers both during the preliminary adjustment and during the power stroke of the machine, so that*

the tackers are always maintained in proper relation to the wiper plates, and therefore occupy the proper position for effecting the tacking stroke, whatever the size of the heel being lasted.

Defendant, in connection with its argument for non-invention, refers (Br., pp. 22-24) to a patent which it calls "the basic Copeland patent No. 244,714 (Vol. II, p. 114) issued sixty years ago", and says of this patent that

"All of the mechanism and movements for heel seat lasting in a power machine with automatic tacking are found in this early patent."

If "all the mechanism and movements for heel seat lasting in a power machine with automatic tacking" had been, in fact, disclosed to the art in a patent issued 60 years ago, it would be strange, indeed, that the industry put up with the inconvenience, slowness and defects of the "bed" machines, and continued to drive the lasting tacks by hand, for all the years intervening between that date and the date when McFeely made his invention.

The actual fact is that although the patentees of the Copeland patent *sought* to provide an apparatus which would improve on the "bed" machine and drive tacks automatically, the "bed" machine was preferable to anything which they had to offer.

The Copeland patent represents nothing but an abortive attempt at a machine which is demonstrably incapable of practical use (Appendix, *infra*, pp. 46-49).

And, as to the further assertion contained in defendant's brief at p. 23 that Copeland provided "adjustable wiper actuators C¹" which made it possible for him "to pre-determinately adjust, before the movement of closing the wipers, the relative position of the wipers with respect to the shoe to accommodate different sizes and rights and lefts", this is simply not the fact. The member C¹ which defendant calls "adjustable wiper actuators" is merely the

frame of the machine, and is so described in the patent (Appendix, *infra*, p. 49).

The District Court found as facts that the features of construction defined in McFeely's tacker-wiper claims were "new and useful" and "involved invention over the prior art" (Findings 25, 35, I, 481, 482). >

DEFENDANT'S ASSERTION THAT THE FIRST McFEELY PATENT SHOWED A "PREDETERMINED WIPER ADJUSTMENT".

Defendant's brief describes on p. 11 what it calls a "predetermined wiper adjustment" of the first McFeely patent; and the statement that there was such an adjustment in that patent occurs repeatedly in the brief (see, for example, p. 17 and the parallel column insert opposite p. 17). Also, the legends applied to the drawings of the first McFeely patent in the sheet of drawings appended to the brief label certain parts as "means for the predetermined adjustment of the wipers to initially position the wipers for different sizes of shoes", using exactly the same terms which the legends applied to the drawings of the McFeely patent in suit on the same sheet employ.

There is no wiper adjustment whatsoever, "predetermined" * or otherwise, in the machine of the first McFeely patent, and the patent will be searched in vain for any reference to such an adjustment. The passages of the patent cited in defendant's brief as purporting to show a "predetermined wiper adjustment" (Br., pp. 11, 12) show nothing of the sort. The "spring 88" to which the brief refers (p. 12) as the "predetermined adjustment" has no such function or effect. Varying the tension of this spring merely varies the force required to retract the wiper; it does not and cannot have any effect whatsoever on the

* We find it difficult to comprehend the meaning of the word "predetermined" as describing an adjustment.

initial position of the wiper or on the extent of the retraction of the wiper or on the point in the operation of the machine at which this retraction takes place. It makes no difference in the wiper movement.*

And if defendant were right in its pretense that this spring 88 is a form of "predetermined wiper adjustment," still it would not be the wiper adjustment of the patent in suit, which is, as described in the claims, "means for effecting a preliminary adjustment of the wipers to the contour of the shoe" (claim 85), "means determinately to adjust the positions of the wiper plates to initially position the wiper plates to act on the marginal portions at the end of a shoe upper mounted on the last" (claim 6).

DEFENDANT'S ATTACK ON THE FORM OF THE CLAIMS.

Defendant's brief, citing the decisions of this Court in *Bassick v. Hollingshead*, 298 U.S. 415 and *Lincoln v. Stewart Warner Corp.*, 303 U.S. 545 argues that

"It is immaterial whether such adjustments were mere substitutions of one adjustment for another already old in the art, or the adjustments themselves were *per se* new and better. In any event, there is no excuse to reclaim the old heel seat lasting machine by either substituting one adjustment for another or adding an improved adjustment." (Dfts. Br., p. 8)

*"Q. 126. I will ask you, Mr. Willhauck, whether there is in that mechanism any preliminary adjustment whatsoever for the wiping position. A. There is not." (I, 417.)

"Q. 89. Please state whether you find in that prior art patent to McFeely 1,129,881 any means for effecting a preliminary adjustment of the wipers to the contour of the shoe. A. No, sir, there is none." (McNulty, I, 465.)

"This patent discloses no means for adjusting the position of the wipers or tackers preliminary to the power stroke." (D.C. Finding 29; I, 481).

See also Appendix, pp. 41-42.

Again the brief says (p. 16):

"These adjustments should have been, of course, claimed *per se* if they were new instead of claiming them as elements of the entire combination which was otherwise old."

And at p. 29 the brief says

"McFeely did not stop with patenting these adjustable features themselves, but included the old features of the first McFeely patent which expired in 1932. McFeely, in his present claims, clearly failed to point out what he invented, if anything, but comingled his alleged improvements with an old heel seat lasting machine which was public property."

This criticism of the claims is utterly unfounded.

The claims do not purport "to reclaim the old heel seat lasting machine" by "substituting one adjustment for another", or "adding an improved adjustment", or to "comingle his alleged improvements with an old heel seat lasting machine". *They recite only those elements which co-operate to produce the "new result" and "new unitary mode of operation of the entire machine" found by the court below to have been the result of McFeely's invention.*

Since the invention consists in a relationship and interconnection between tackers and wipers which finds its utility in an automatic heel seat laster, the claims properly begin with the introductory clause "A machine of the class described" (claim 6), or "In a machine of the class described" (claim 85).

Claim 6 describes the invention as a combination of wiper plates, adjusting mechanism for the wiper plates to initially position them to act on the marginal portions at the end of a shoe upper mounted on a last, means to effect

bodily and swinging movement of the wiper plates to do their wiping work during the power stroke of the machine, tackers cooperating with the wiper plates and means to maintain the tackers in predetermined relation to the wiper plates in all positions of adjustment of said plates.

Claim 85 defines the combination as including last and shoe positioning means, wipers, means for effecting a preliminary adjustment of the wipers to the contour of the shoe, power means for subsequently operating the wipers, and tackers connected to the wipers for preliminary adjustment with them and for power-effected movement with the wipers subsequently over the shoe.

The claims do not purport to cover as part of the invention any elements whatsoever other than those elements which are involved in the new interrelationship, nor any element the operation of which is unchanged. If they had omitted any element which they name, they would have been criticized as incomplete and not stating the true invention.

Defendant's brief, as a phase of its argument that "these adjustments", as the brief calls them, should have been claimed *per se*, "instead of claiming them as elements of the entire combination which was otherwise old" (Br., p. 16), repeatedly asserts that

"The adjustments may or may not be used; and if used, are always operated *before* the lasting machine starts operating." (Emphasis in original) (Dfts. Br., pp. 7, 31, 32, 35, 43, 48).

This argument, in the first place, assumes what is not true; that the claims are so phrased as to cover the "entire combination which was otherwise old". As we have pointed out, there is no mention in the claims of any elements of the laster except those directly involved in the new combination.

The introductory clauses with which the claims begin, "A machine of the class described", or "In a machine of the

class described", under well-recognized principles of claim construction, import no structural elements into the claim, but merely define the environment or class of apparatus in which the invention defined in the body of the claim finds its utility.*

Also, defendant's argument erroneously assumes that the invention to which the claims are directed is merely an adjustment mechanism which operates only "before the lasting machine starts operating". On the contrary, a vital part of the mechanism involved in the new combination is an interconnection between tackers and wipers such that the tackers move with the wipers *during the power stroke of the wipers* as well as during any preliminary adjustment of the wipers, and it is because of this interconnection, *operative during the power stroke*, that the tackers, at the end of the power stroke of the wipers, are in the proper position with reference to the margins of the wipers to drive their tacks, regardless of the size of the shoe being lasted.

*An introductory clause is, of course, not nugatory; it limits the invention claimed to the art or general class of apparatus which it defines, *Nordberg Mfg. Co. v. Woolery Co.*, 79 Fed. (2d) 685, 690, (C.C.A. 7th,) but it imports nothing by way of structural elements into the claim.

In *Stearns & Co. v. Russell*, 85 Fed. 218, 224 (C.C.A. 6th) the Court said, as to an introductory clause reading "In pill dipping mechanism":

"These words are only used to define the useful purpose to which the patentee intended his device to be devoted, and cannot bear the construction by which all the other substances and parts used in dipping pills may be considered as making up the combination claimed."

In *Ford Motor Co. v. Parks & Bohne*, 21 Fed. (2d) 943, 946 (C.C.A. 8th) the Court, dealing with an introductory clause reading "An automobile transmission band", said that an introductory clause of a claim

"imports nothing by way of structural elements into any of these claims. . . . These words merely state the environment in which the device is to be used."

The principles for which the decisions in the *Bassick* and *Lincoln* cases stand have no application to these claims.

In the *Bassick* case (*Bassick Co. v. Hollingshead Co.*), 298 U.S. 415, the patentee Gullborg, having invented and patented in a patent not in suit a new form of pin fitting, undertook in certain of the claims of the patent in suit (14 and 15) to claim that pin fitting in combination with "any form of grease gun whether that claimed in his patent or unpatented and old in the art" (pp. 424, 425). He also invented an improved form of coupler shown in the patent in suit, but instead of patenting this as such, he claimed (claims 1-6, 8 and 10) "a combination of pump, hose coupler and pin fitting, and embodied in the combination his improved form of coupler" (p. 424).

The Court said (p. 425):

"The question, then, is whether, by this method, the patentee, by improving one element of an old combination whose construction and operation is otherwise unchanged, may, in effect, repatent the old combination by reclaiming it with the improved element substituted for the old element. That this cannot be done is shown by numerous cases in this and other federal courts."

In the *Lincoln* case (*Lincoln Co. v. Stewart Warner Corp.*), 303 U.S. 545 the inventor Butler, as the Court said (p. 549), did no more than invent a patentable improvement in a chuck, but his claim was directed to a combination including the new chuck, a nipple, and a grease gun (p. 548).

The Court said (p. 549):

"As we have said of Gullborg in the *Rogers* case, having hit upon this improvement he did not patent it as such but attempted to claim it in combination with other old elements which performed no new function in his

claimed combination. The patent is therefore void as claiming more than the applicant invented. The mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than that theretofore performed or produced by them, is not patentable invention. And the improvement of one part of an old combination gives no right to claim that improvement in combination with other old parts which perform no new function in the combination."

As contrasted with the claims involved in the cases cited by defendant, the claims here involved *recite those elements, and those elements only, which co-operate to produce the new result.*

The Court of Appeals was entirely familiar with the principle enunciated in this Court's decisions in *Bassick v. Hollingshead* and *Lincoln v. Stewart Warner Corp.* and, in fact, cited those decisions in its opinion (I, 511, 513); but it *correctly found the facts in this case to be such as to render that principle inapplicable.*

The Court said (I, 511):

"Taken together, the improvements in the second McFeely machine gave a new result and a new unitary mode of operation of the entire machine. There is here much more than mere improvement in quality or quantity of product due to the independent functioning of an improved element, as in *Bassick v. Hollingshead*, 298 U.S. 415, or *Kodel Electric & Mfg. Co. v. Warren Clock Co.*, 62 Fed. (2d) 692 (C.C.A. 6th)."

"The patent in suit is not merely the aggregate of laster and tacker, and the disclosed improvements upon prior art are not limited to the addition of adjustability."

THE SLIDING HEEL BAND ADJUSTMENT OF THE PATENT IN SUIT—CLAIMS 23 AND 91.

Another feature of construction in which McFeeley in his patent in suit improved not only over the machine of his first patent, but over all prior art mechanisms, is found in what is known in the record as the *sliding heel band adjustment mechanism*.

This is the mechanism to which claims 23 and 91 in suit relate.

In the machine of the patent in suit (as in the machine of McFeeley's first patent and in some of the "bed" lasting machines of the prior art) there is provided a U-shaped leather band, called a "heel band", which is adapted to grip the heel end of the shoe and hold it firmly during the lasting operation in proper position for the action of the wipers and tackers. Such a heel band is shown at 60 in Fig. 6 of the patent in suit (II, p. 10) and its position with reference to the wiper plates 254 is shown in Fig. 5 on the same page. The manner in which the heel band embraces the heel of the shoe being lasted is shown in Fig. 9 of the patent (II, p. 12).

The heel band should be adjusted forwardly or rearwardly, according to the size of the shoe to be operated upon, in order that the heel of the shoe, whatever its size, may be properly positioned, lengthwise, with reference to the wipers and tackers.

The essential feature of the heel band adjustment mechanism shown in the McFeeley patent in suit is that this mechanism is such that the heel band *slides* with relation to its supports and with relation to certain pressure members which, during the lasting operation, exert pressure upon its sides.

Because of this free sliding movement, the band does not buckle as it is moved back and forth, and, furthermore,

movement of the band leaves the pressure members unaffected so that the direction and force of their pressure is independent of the position of the heel band (I, 102-104) and this pressure may be applied at varying distances from the bight of the band.

Neither in the first McFeely patent nor anywhere else in the prior art is there to be found such a sliding heel band adjustment, and so the District Court found.

The findings of the District Court on the matter are as follows:

"6. The sliding heel band adjustment claims, Nos. 23 and 91, are specifically directed to mechanism in which the heel band is adjustable lengthwise of the last, to accommodate shoes of different sizes; and in such adjustment the heel band slides relative to its side supporting members and to its pressure members." (I, p. 478).

"26. The features of construction defined in the sliding heel band adjustment claims of the McFeely patent in suit, Nos. 23 and 91, were new and useful." (I, p. 481).

"29. . . . This patent [the first McFeely patent 1,129,881] discloses no . . . lengthwise adjustment of the heel band in which the band slides relative to its supports and pressure members. . . ." (I, p. 481).

"33. The prior patents cited by defendant against claims 23 and 91 of the McFeely patent in suit, such as the Brock patents Nos. 601,935, 1,002,818, and 1,188,616; Cavanagh No. 1,130,142, and others, taken singly or in combination, fail to disclose the sliding adjustment of the heel band disclosed in the McFeely patent in suit and claimed in claims 23 and 91 thereof." (I, p. 482).

The assertions of defendant's brief (p. 7 and elsewhere)

that "sliding heel band adjustment before the lasting operation for the in and out movement of the shoe" was "old in prior art patents" is, thus, *contrary to the fact finding of the District Court.*

The form of heel band mechanism which McFeely provided in his first machine was entirely different from, and inferior to, the sliding heel band adjustment of the patent in suit.

As the Court of Appeals found (Opinion, I, 511):

"The heel band of the first McFeely machine was loose and without support and incapable of sliding movement. Upon the withdrawal of the shoe the heel band was ejected as a result of the release of spring tension upon a plurality of cords." *

Defendant's further argument that even if the sliding heel band adjustment disclosed in the patent in suit was new, useful and inventive, still the claims directed thereto should be held void because, as defendant argues (Brief, p. 40 and elsewhere), the patentee made a "mistake" "in patenting an old combination instead of patenting the invention he had made", is as unwarranted as the similar argument made by defendant with reference to the tacker-wiper claims, which we have discussed above (pp. 18-23).

Claim 91 is typical of the two claims in suit directed to this subject matter. It reads:

"91. In a machine of the class described, the combination with last and shoe positioning means, of an end embracing band for clamping the upper round the lateral periphery of an end of the last, supporting

*In the Appendix hereto we describe in detail the sliding heel band adjustment of the patent in suit (p. 42), the heel band mechanism of the expired McFeely patent (p. 44), and the forms of heel band adjustment shown in the other prior art patents mentioned in defendant's brief (pp. 45, 46).

means relatively to which the opposite side portions of the band are permitted to slide lengthwise of the shoe, and means connected to the end portion of the band for adjusting it lengthwise of the shoe and relatively to said supporting means."

This claim is no more subject to the criticism to which the claims involved in *Bassick v. Hollingshead*, *supra*, and *Lincoln v. Stewart Warner*, *supra*, were subject than are the tacker-wiper claims. It does not purport to "repatent an old combination by reclaiming it with the improved element substituted for the old element" (*Bassick v. Hollingshead*, 298 U.S. at p. 425). It recites merely those elements which are directly involved in the sliding heel band adjustment, to wit, the "last and shoe positioning means" (i.e. the jack, with reference to which the heel band must be positioned), the heel band, the supporting means for the band with reference to which the band has a sliding connection, and the mechanism for adjusting the position of the band relatively to the supports; and the claim indicates the class of apparatus in which the combination claimed has its field of use by the introductory clause, "In a machine of the class described."*

*Claim 23, also directed to the sliding heel band adjustment mechanism, reads as follows:

"23: A lasting mechanism of the class described having, in combination, a substantially U-shaped flexible clamping member to embrace one end of a last and shoe upper, means to support a last and shoe upper with one end positioned within said clamping member, a movable adjusting member connected to the lower edge of said clamping member at its rear closed end, means to support the lower edges of said clamping member at opposite sides, pressure members arranged to engage the opposite sides of the U-shaped clamping member at points above its lower edges and to press said sides inwardly to force the end of the upper in close conformity to the last, manually operable means to move said adjusting member to slide the U-shaped

GENERAL CLAIM 42.

McFeely's claim 42 is, as it was called by the Court of Appeals (I, 507) a general claim. It reads as follows:

"42. A machine of the class described having, in combination, clamping means to embrace one end of a last and shoe; end wipers positioned to operate on the edges of the upper at said end of the shoe, a hold-down mounted for vertical movement and positioned to engage the bottom of the last and shoe, a support for a last and shoe constructed and arranged for manually effected movement to engage the last and shoe with said clamping means and hold-down, power operated mechanism effective to move said support forcibly to press the last and shoe against said clamping means and hold-down and to actuate the clamping means, mechanism effective in timed relation to the clamping means to depress the hold-down and support to position the shoe bottom determinately below the plane of the wipers, mechanism operative to actuate the wipers to break down the edge of the upper over the bottom of the positioned last and shoe, the said hold-down mechanism being automatically operative subsequently determinately to raise the hold-down, the said power operated mechanism being operative substantially coincidentally correspondingly to raise the said support to engage the bottom of the last and shoe with said hold-down with the

clamping member relatively to said pressure members, means to operate said pressure members to clamp the shoe upper, and end wiping mechanism to wipe down the edges of the upper over the bottom of the last."

This claim goes into somewhat greater detail than claim 91 and is narrower than claim 91 in that it includes certain limitations not stated in claim 91.

shoe bottom positioned substantially in the plane of the wipers, and the end wiper mechanism being subsequently operative in timed relation to wipe over and compact the broken down edge of the upper over the bottom of the last and shoe, and manually adjustable means for determinately varying the amount of vertical movement of the hold-down."

This claim recites the sequence in which various named elements of the machine and particularly the "hold-down" operate.

According to the claim, there is provided a mechanism which depresses the hold-down below the plane of the wipers before the first stroke of the wipers takes place and thereafter raises the hold-down; after which the wiper mechanism operates again, etc.

The District Court described the subject matter of the claim as follows:

"Claim 42 is directed to a machine having the general characteristics and sequence of hold-down movements of that shown and described in the patent, one element of which machine is manually adjustable means for determinately varying the amount of vertical movement of the hold-down." (I, 478).

A reason for the emphasis placed upon that element of the claim which is described as "manually adjustable means for determinately varying the amount of vertical movement of the hold-down" is that defendant asserted that it avoided infringement of this claim because it had no such adjustable means.

On this issue of fact there was a conflict of testimony. The plaintiff's witnesses Ryan and Condon testified that when they inspected one of defendant's machines prior to the trial such a device was present in it; but the particular

instrumentality which they testified they saw on the machine was not present on the machine produced by defendant at the trial, and certain witnesses for the defendant testified that it had never been present on defendant's machines.

The District Court found that the testimony of the plaintiff's witnesses was true and not that of defendant's witnesses; and the Court found, furthermore, that although the machine produced in court did not have the particular element which had been present on the machine before the trial, it did have another element which responded to the requirements of the claim.

The District Court said on the point of the conflict of testimony (Opinion I, 484):

"On the issue of fact as to infringement the Court holds with the plaintiff, based on the testimony of witness Ryan, who testified that the hold-down adjustment mechanism was in place on the machine when he saw it at defendant's plant";

and the formal finding of fact on the subject made by the District Court was as follows:

"Defendant's machine produced in court had a stop for determining the amount of vertical movement of the hold-down. . . . Originally, defendant's machine had a form of adjustable stop similar to that shown at 'X' on the photograph of the Moenus automatic heel seat laster, Plaintiff's Exhibit 10. Whichever of these forms is used, the machine has manually adjustable means for determinately varying the amount of vertical movement of the hold-down." (Finding 16, I, 480).

These findings were affirmed by the Court of Appeals (I, 507, 508).

Defendant's brief neglects entirely in its consideration of this claim the fact that the claim is directed to a series of

elements operating in a particular sequence. It treats the claim as if its only feature of importance was the element described in the claim as "manually adjustable means for determinately varying the amount of vertical movement of the hold-down", which element it asserts was shown in the first McFeely patent and also in a prior art patent to Pym.

Even this latter assertion is not correct, and both of the lower courts so found.

The District Court found (Finding 29, I, 481) that the first McFeely patent did *not* disclose "any adjustment for varying the amount of vertical movement of the hold-down".

And the Court of Appeals concurred, saying (I, 511):

"There was absent in the prior McFeely machine means for adjusting the vertical movement of the hold-down that are present in the patent in suit."

Also, as to defendant's claim that the prior Pym patent disclosed such an adjustment, the District Court expressly found to the contrary in Finding 30 (I, 481, 482):

"The Pym patent does not disclose . . . any means for adjusting the amount of vertical movement of the hold-down."

Since we find in defendant's brief no effort to show that mechanism operative in the sequence defined in this claim was present either in the first McFeely patent or elsewhere in the prior art, and since the District Court expressly found to the contrary, there appears to be no reason for going into detail on this subject.

The findings of the District Court on the point are as follows:

" . . . This patent [the first McFeely patent] does not disclose the sequence of operations of the McFeely patent in suit, as defined in claim 42 in suit. . . ." (Finding 29, I, 481).

"The Pym patent does not disclose the sequence of operations called for by claim 42 of the McFeely patent in suit." (Finding 30, I, 482):

Defendant's attack on the form of this claim is of a piece with its attack on the form of the other claims previously discussed. It is based upon the erroneous assumption that the subject matter of the claim is merely an adjustment mechanism which operates in advance of and is independent of the lasting operation. To the contrary, the claim is directed to a combination of elements operating in a particular sequence during the lasting operation.

ALLEGED "AGGREGATION".

Defendant's brief argues (pp. 2, 44-52) that the claims in suit merely "aggregate old adjusting features with an old combination" and that, therefore, the decision of the Court of Appeals conflicts with "the principles applied in such cases as *Grinnell v. Johnson*, 247 U.S. 426."

This argument, which is made under the heading (p. 44) "Aggregation: Another Form of an Attempt to Repatent Expired Old Combinations", is a mere restatement of defendant's argument that all that McFeely did in the patent in suit was to "aggregate old adjusting features with an old combination", with which argument we have already dealt.

The case of *Grinnell v. Johnson*, cited, stands for the proposition that merely bringing together "old elements performing well known functions, producing no novel and useful result" is not invention (247 U.S. 426, 431). The Court of Appeals was familiar with this principle, and in fact cited *Grinnell v. Johnson* in its opinion (I, 511), but it held the principle inapplicable to the facts of the present case because it found that

"The improvements in the second McFeely machine gave a new result and a new unitary mode of operation of the entire machine. There is here much more than mere improvement in quality or quantity of product due to the independent functioning of an improved element." (Opinion, I, 511).

ALLEGED ERRONEOUS RELIANCE OF COURT OF APPEALS ON "COMMERCIAL SUCCESS".

Defendant's brief asserts (p. 3 and pp. 52-62) that the Court of Appeals held McFeely's second patent, in suit, valid over the first McFeely patent only because "the second was more successful commercially than the first"; and asserts that the decision was, therefore, "contrary to the doctrine established by this court in *Smith v. James* and *Smith v. Hill*, 301 U.S. 216, and numerous other cases."

The brief says (p. 53):

"The Court of Appeals founded its decision on the contrary principle to that established by this Court, that is, that even if the anticipating structure operated successfully, if the machine of the patent in suit was more commercially successful, then there could be no anticipation." (Emphasis in original.)

The decision of the Court of Appeals was founded on no such basis. It was founded upon the fact that structural improvements embodied in the second machine not found in the first machine "gave a new result and a new unitary mode of operation of the entire machine" (Opinion, I, 511).

The significance of the facts, noted by the Court of Appeals, that whereas only one machine was ever built in accordance with the first McFeely patent, and that one machine was scrapped, while the automatic heel seat lasters of

the patent in suit have gone into wide use, more than 1200 of them being in operation throughout the world (Opinion, I, 510) is that such a comparison attests the practical importance of the improvements made in the second patent which were not present in the first patent; and this was the significance attached to these facts by the Court of Appeals.

Thus the Court said (Opinion, I, 510):

“Between commercial success demonstrated by brief use of a single machine abandoned and not duplicated, and commercial success of the machine of the second patent, there yawns a wide gulf, not to be bridged merely by insistence that the second McFeely patent advanced the art *but in minor and inconsequential details.*”

It is also highly significant as to the importance of the improvements shown in the patent in suit as compared with the structure of the first McFeely patent, that the manufacturer of defendant's machines, when it set out to build an automatic heel seat laster, *copied not the structure of the first McFeely patent, which it was free to use, but the structure of the McFeely patent in suit (supra, p. 2).*

**THE REASONS ADVANCED IN THE PETITION FOR ALLOW-
ANCE OF THE WRIT ARE SHOWN TO BE
UNFOUNDED.**

As the “reasons relied upon for the allowance of the writ” defendant's petition for certiorari asserted (1) that the Court of Appeals had rendered a decision in conflict with the decisions of this Court in *Bassick v. Hollingshead*, 298 U.S. 415 and *Lincoln v. Stewart Warner*, 303 U.S. 545, “prohibiting the extension of monopoly of an expired patent by the substitution of mechanical details, already old in the art”, etc.; (2) that the Court of Appeals decision conflicted with the decision of this Court in *Grinnell v. Johnson Co.*,

247 U.S. 426 because, as asserted, the patent in suit "merely aggregates old adjusting features with an old combination"; (3) that the Court of Appeals decision conflicted with the decision of this Court in *Smith v. James*, 301 U.S. 216 because it had failed to assign anticipatory effect to the expired McFeely patent merely because that patent was "commercially unsuccessful"; (4) that there was "diversity of opinion below" in that one judge dissented from the decision of the Court of Appeals and "there is no opportunity of securing a diversity of opinion with other Circuits"; and (5) that the case is "one of great public importance to the public".

Analysis of the case shows, as to the first and second reasons relied upon, that the Court of Appeals was familiar with, and in fact cited in its decision, the decisions of this Court in the cases cited by defendant; *but found that the facts in this case did not bring it within those authorities.* The Court found that the patent in suit does not extend the "monopoly of an expired patent by the substitution of mechanical details already old in the art", and that the claims do not purport to cover merely aggregations of "old adjusting features with an old combination", but that, on the contrary, the improvements to which the claims were directed "gave a new result and a new unitary mode of operation of the entire machine" (I, 511).

Thus the first and second reasons assigned for the allowance of the writ prove, upon analysis, not to be valid reasons. *The case turned upon its facts, and not upon a question of law.*

As to the third reason assigned—the assertion that the Court of Appeals failed to assign anticipatory effect to the expired McFeely patent merely because it was "commercially unsuccessful", while the machine of the patent in suit has had great commercial success—this also is shown, upon analysis, to be incorrect. The decision was based upon the

fact that the expired McFeely patent did not disclose those improvements to which the claims in suit are directed, and that those improvements were shown by the record to have been of large importance.

As to the fourth reason assigned in the petition for the grant of the writ—the fact that one of the Circuit Judges dissented from the opinion and that, “there is no opportunity of securing a diversity of opinion with other Circuits”,—we do not suppose that this of itself is a sufficient reason, or was regarded by the Court as a sufficient reason, for the grant of the writ.

As to the final reason advanced, the alleged “public importance” of the case, the fact is that the case is of no more public importance than any other ordinary patent case.

There are no infringing machines of domestic manufacture, and, so far as appears, no users of the “Calzera” machine in this country except this defendant, which was sued because the German manufacturer of the machines could not be reached by process; nor is there any likelihood, in view of the war, that any more of these machines will be imported before the date when the patent in suit expires, which is October 27th of this year.

As to the machines which have been leased by the plaintiff, embodying the patented construction, the rentals paid for the use of these machines are ordinary rentals for the use of leased property.

If the Court agrees with the foregoing views, we respectfully suggest that it would be appropriate for the Court to dismiss the writ, as was done, under similar circumstances, in the following cases:

Keller v. Adams-Campbell Co., 264 U.S. 314;

Layne & Bowler Corp. v. Western Well Works, 261 U.S. 387;

Furness, Withy & Co. v. Yang-Tsze Insurance Assoc., 242 U.S. 430;

U.S. v. Rimer, 220 U.S. 547;

Davis v. Currie, 266 U.S. 182;

Erie R.R. v. Kirkendall, 266 U.S. 185;

Houston Oil Co. v. Goodrich, 245 U.S. 440.

CONCLUSION.

The Court of Appeals decision violates no principle announced by this Court in the cases relied upon by defendant or in any other cases.

Defendant's quarrel is with fact findings of the lower courts.

The question whether or not the quality of invention is involved in a patentee's construction is a question of fact.*

Likewise, the question whether the combinations described in the claims in suit "merely aggregate old adjusting features with an old combination", as alleged by defendant, or whether the structural elements of the claim cooperate to produce a new and unitary mode of operation, as held by the Court of Appeals, is a question of fact.

This Court has repeatedly said that it is an established rule that

"This Court accepts the findings in which two courts concur unless clear error is shown."**

*"The question whether an improvement requires mere mechanical skill or the exercise of the faculty of invention, is one of fact; and in an action at law for infringement is to be left to the determination of the jury." *Thomson Spot Welder Co. v. Ford Motor Co.*, 265 U.S. 445, 446.

***Pick Mfg. Co. v. General Motors Corp.*, 299 U.S. 3, 4;

Stuart v. Hayden, 169 U.S. 1, 14;

Texas etc. Railway Co. v. Railroad Commission, 232 U.S. 338;

(Footnote continued on next page.)

Independent analysis of the case shows, moreover, that the fact findings of the lower courts were entirely correct, and that the decisions of those courts involved no errors of law.

The decisions of the District Court and of the Court of Appeals were correct, and should be affirmed.

Respectfully submitted,

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(Footnote continued.)

Texas etc. Co. v. Brotherhood, 281 U.S. 548, 558;
U. S. v. Commercial Credit Co., 286 U.S. 63, 67;
Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 416;
Joseph Schlitz Brewing Co. v. Houston etc. Co., 250 U.S. 28;
Capitol etc. Co. v. Cambria Steel Co., 249 U.S. 334;
Just v. Chambers, 312 U.S. 383;
The Germanic, 196 U.S. 589, 595;
Continental; etc. Co. v. Chicago etc. Railway Co., 294 U.S. 648, 678.

APPENDIX.

Defendant has attached to its brief (p. 31; p. 67) several sheets of colored drawings and (p. 17) a "parallel column" chart supposed to demonstrate similarities between prior art structures, particularly that of the earlier McFeely patent, and the patent in suit. In order to demonstrate similarity between two structures, it is necessary to do more than to apply similar colors to patent drawings; it is necessary to show justification for the colors and legends applied. The legends and colors applied by defendant to these illustrations, as well as statements made in the chart and throughout the body of the brief regarding the structures, frequently depart so far from accuracy as to indicate an inadequate understanding of the construction and operation of the machines in question.

For example, at pp. 23, 24 of its brief, defendant calls the part *c*¹ of the Copeland patent No. 244,714, an "adjustable wiper actuator". This part, as stated in the Copeland patent (p. 2, lines 8-9), is merely "*the frame c¹ of the machine*".

Again, defendant's "Appendix A" bears coloring and legends, indicating in the structure of the earlier McFeely patent, "means for the predetermined adjustment of the wipers to initially position the wipers for different sizes of shoes", and defendant makes other statements to the same effect elsewhere in its brief. *There is no such means in the machine (infra, pp. 41-42).*

To undertake to list all the erroneous statements and legends in defendant's brief would require much space. We merely ask that this Court, before accepting the statement of either party as to such matters, satisfy itself that the statement made is correct.

DESCRIPTION OF THE TACKER-WIPER MECHANISM OF THE McFEELY PATENT IN SUIT.

Claims 6 and 85 in suit are directed to the tacker-wiper mechanism, which is illustrated particularly in Figs. 2 and 3 of the patent (II, 4, 6). Fig. 2 is a vertical sectional view through the head of the machine and Fig. 3 is a horizontal section.

The wiper plates 254 (Fig. 5) are positioned above the heel band 60 in position to wipe over the heel end of a shoe which is held in the heel band. The wipers are advanced and closed over the shoe by mechanism shown in Figs. 2 and 3 of the patent and comprising a cam track 228, a cam roll 226, a slide 224, bell crank levers 272, pinion gears 274 and slides 276. By this mechanism, simultaneous advancing and closing movement is imparted to the wiper plates.

The initial positions of the wiper plates are adjustable by means shown in Fig. 3 of the patent. By moving the hand lever 270, the pinion 268 moves the plate 264 with relation to the slide 276 and thus, through the link 284, opens or closes the wipers and tackers, thus adjusting their positions relative to the mechanism for operating them.

The patent in suit shows five tacker units (Fig. 3). Two of these units, numbered 282, are called "side" tackers, two, numbered 288, are called "corner" tackers, and one, numbered 234, is called an "end" tacker.

The side tackers are mounted on the plates 264 which close the wipers and are connected thereto by means of the nut and bolt (unnumbered), clearly shown in Fig. 3. The corner tackers are urged by springs 290 to follow the inward movement of the wipers, and the end tacker is urged by the spring 238 to follow the advancing movement of the wipers. The tackers are thus maintained in predetermined relation to the wipers in all positions of the wipers.

DESCRIPTION OF THE TACKER-WIPER MECHANISM OF
THE EXPIRED McFEELY PATENT NO. 1,129,881.

In this old patent McFeely attempted to coordinate the movements of the tackers and wipers so that these parts would automatically, during the power movement of the machine, position themselves properly whatever the size of the shoe being operated upon. This he undertook to do by providing "feelers" or "stops" 122 (Fig. 8) attached to the tack blocks 120, which feelers, by contacting with the shoe or with the heel band, were supposed to stop any further forward movement of the tackers and leave them in the proper position to drive their tacks; and to this was added mechanism which, when the advancing movement of the tackers had ceased, *would cause the wipers 70, 71, 72 to retract*, presumably far enough to allow the tacks to be driven without interference from the wiper plates.

This retraction or "backing up" of the wipers is described in the patent, p. 5, lines 33 *et seq.* and is illustrated particularly in Figs. 8 and 13 of the patent. When the stop 122 arrests the forward movement of the tacker block 120 and the slide 85, the beveled face of the "displaceable member" 84 wedges sidewise against the influence of the spring 88 and spring-pressed beveled plunger 87 (Fig. 8). When this happens, "the cam slot 842 acts on the stud 840 to retract the wiper slide and wiper slightly with relation to the shoe and with relation to the tack block so as to permit the tacks to be driven" (patent; p. 5, lines 40-44).

All this is described in the testimony of the witness Willhauck at Qs. 111-127, I, 411-417.

Defendant's brief (p. 20) says that when the resistance of the plunger 87 is overcome, the movement of the wipers will cease. To the contrary, the patent specifically states (p. 5, lines 33-44) that at this point the wipers are retracted

or pulled backwards with relation to the shoe and with relation to the tackers in order to permit tacks to be driven.

Defendant's version of the possibility of adjustment in the first McFeely patent, as stated in its brief at page 20, is that "manual predetermined adjustment" of the plunger 87 is accomplished by the spring 88. The patent itself contains no mention whatever of any adjustment of the wipers, either preliminary or otherwise, nor is there in the mechanism itself any capacity for such adjustment. Increasing the tension of the spring 88, as suggested by defendant, would merely oppose greater resistance to the power stroke of the machine. The function of the spring 88 is to permit sidewise movement of the "displaceable member 84" when the stops 122 arrest the movement of the slide 85, thus drawing the wipers back off the shoe (patent, p. 5, lines 33-43, II, 287). Regardless of the tension on the spring 88, this spring *must* yield when the stops 122 contact the shoe,—it must yield exactly at this point in the movement of the slides 85 and 850 and at no other point (patent, p. 5, lines 33-43). Thus it is evident that the spring 88 has no effect whatever on either the initial positions of the wipers or the extent to which they move over the shoe (*supra*, pp. 17-18).

DESCRIPTION OF THE SLIDING HEEL BAND ADJUSTMENT OF THE McFEELY PATENT IN SUIT.

Claims 23 and 91 in suit relate to the sliding heel band adjustment shown in the McFeely patent. In describing this mechanism, we shall refer to Figs. 4, 5 and 6 of the patent (II, 8, 10). Fig. 4 of the patent is a horizontal sectional view, looking downward on the heel band mechanism from the top of the machine. Figs. 5 and 6 are perspective details.

The heel band 60 is a U-shaped leather band adapted to grip the heel end of the shoe, which is mounted on a last

supported by a jack 148 (Fig. 1; II, 2). The heel band conforms the upper materials tightly to the contour of the heel end of the last. The band is slidably supported from below by hook-shaped metal clips 74 adjacent its open ends.

The heel band is closed about the shoe by the power-driven rack slide 130, which is actuated by the cam of the machine. Retraction of this slide moves the "equalizer" or operating member 134 rearwardly. Rearward movement of this member moves the rack members 136 and bell crank levers 138, to produce an inward motion of the open ends of the heel band toward each other. This inward motion is transmitted from the bell crank levers to the heel band through the springs 100 and the pressure members 84.

Mechanism for adjusting the heel band lengthwise of the shoe is provided and comprises (Fig. 4; II, 8) the arm 90 adapted to rotate the shaft 86, thus moving the rack slide 66, which is connected to the rear of the heel band by a clip 62 (Fig. 6, II, 10). By this means the heel band may be moved forward and rearward in the machine, in a direction lengthwise of the shoe.

It is important to note that in this lengthwise adjustment of the heel band, *the heel band slides in the supporting clips 74* (Fig. 5; II, 10). Neither the supporting clips nor the pressure members 84 move with the band, but these elements remain stationary while the band slides back and forth in response to manipulation of the adjusting arm 90.

The importance of this system, by virtue of which the heel band may be *slidingly* adjusted forward or backward *with reference to its supporting clips and pressure members*, without distortion and without varying the direction or amount of pressure applied to the band from the sides during the operation of the machine, has been mentioned above (pp. 24, 25) and is explained in more detail by the witness Willhauck at I, 102-104.

DESCRIPTION OF THE HEEL BAND MECHANISM OF THE
EARLIER McFEELY PATENT NO. 1,129,881.

The heel band mechanism of the prior McFeely patent is best shown in Fig. 19 (II, 282) of that patent, supplemented by Fig. 8 (II, 272). In the machine there are provided a plurality of cords, marked 50 in Fig. 8 (they are shown as four in number), which, as shown in Fig. 19, are attached at their outer ends to springs, unnumbered in Fig. 19, which tend to keep them tight. These cords pass around the ends of pivoted heads marked 51 in Fig. 19.

If a heel band is used in this device, as shown in Figs. 19 and 8, it must be fitted around the shoe before the shoe is inserted in the machine and then pushed into the machine with the shoe. In this position the cords pass around the sides and closed end of the heel band, as indicated in Fig. 19, and the tension on the cords, exerted by the springs to which their ends are attached, causes them to hold the heel band against the heel of the shoe while the machine operates.

The patent describes the cords referred to at page 3, line 130 to page 4, line 58.

Since the heel band is a loose part, when the shoe, having been lasted, is withdrawn, the cords, under the influence of the tension of the springs at their ends, *forcibly eject the heel band, along with the shoe.*

When the next shoe is to be operated upon, the heel band must be manually placed upon it, as before, and again inserted into the machine.

DESCRIPTION OF THE HEEL BAND MECHANISM OF THE
BROCK PATENT NO. 1,188,616.

In an insert opposite page 31 of its brief, defendant reproduces Figs. 9 and 10 of the drawings of this Brock patent and at pages 30-31 of the brief, defendant asserts that this patent discloses the heel band adjustment of the patent in suit.

This Brock patent shows in Fig. 10 a heel band which is supported by a chain 86 (resembling generally a bicycle chain). There is a hand wheel 96 by which the chain, and with it the attached band, may be moved forwardly and rearwardly, and another hand wheel 94 by which the rear end of the chain and band may be moved laterally.

There are recesses 84 in the bottom of the heel band (Fig. 9) which recesses are, as the patent explains (at page 3, lines 119-123) "chambered out as at 84 to reduce the weight of the band and to add to the resiliency of the end portions of the band."

There is in this construction *no means whereby the heel band slides relatively to its supports*, as in the McFeely patent in suit. In the Brock construction any movement which is imparted to the band is imparted to it *through its supporting chain*, to which the depending members are connected, *and the chain and those members move with the band*. The supporting chains are attached at their forward ends to spring tensioned pivoted members, as indicated in Fig. 1 of the patent (II, 384) so that if the chain is drawn backwardly by the mechanism 96, these pivoted members will yield inwardly, while if the adjustment mechanism is moved so as to allow the chain to be moved forwardly, these pivoted members will move it outwardly at its ends.

The District Court found (Finding 33, I, 482) that this Brock patent No. 1,188,616 does not disclose the sliding adjustment of the heel band disclosed and claimed by McFeely in the patent in suit.

HEEL BAND MECHANISMS OF OTHER PRIOR ART PATENTS.

At page 31 of its brief, defendant lists a number of additional patents alleged to disclose adjustment of the heel band in the manner of the patent in suit. Defendant does not support this general assertion with any description of the mechanisms involved and the reason it has not done so becomes evident upon an examination of the patents.

Of the patents listed by defendant at page 31, Eaton, No. 596,323, *does not disclose any heel band at all*. In Brock, No. 601,935, Copeland, No. 244,714, and Pym, No. 1,368,968, the heel bands *are not adjustable* lengthwise of the shoe (if, in fact, Copeland can be said to have any heel band).

In Lombard, No. 524,445, Plant, No. 958,280, and Keyes, No. 1,023,854, the mechanisms referred to by defendant as heel bands, if they are adjustable, have no sliding movement with respect to their pressure members and supporting members.

The District Court found (Finding 33, I, 482):

“The prior patents cited by defendant against claims 23 and 91 of the McFeely patent in suit, such as the Brock patents . . . and others, taken singly or in combination, fail to disclose the sliding adjustment of the heel band disclosed in the McFeely patent in suit and claimed in claims 23 and 91 thereof.”



COPELAND PATENT NO. 244,714.

Copeland *et al* show, in Fig. 1, a support c^4 on which last-
ing appliances are mounted, and a rotatable support a^2
upon which the shoe to be lasted is mounted. The idea is
that, having lasted the toe of the shoe with the parts in the
position indicated in Fig. 1, the shoe and its support will
be revolved by the operator to present the heel to the ap-
paratus, and the apparatus will, likewise, be revolved 180°

to present to the shoe suitable heel lasting devices (not shown in the drawing) which are supposed to be located at the end of the member C opposite to that occupied by the toe-lasting devices shown.

According to the patent, the operator is to move the shoe forward until it compresses a clamping mechanism indicated at B, *b*, so as to clamp the flanges at the top thereof about the toe of the shoe, and the operator, while holding the shoe with one hand, is supposed to pull up the upper "by pinchers" (patent, p. 1, line 60), with his other hand. This having been done, he is supposed to shove the shoe farther forwardly, by which action he will move the bed C (Fig. 1), which is supported to slide horizontally in the frame *c*¹, and this forward movement of the bed C is supposed to cause plates D, D¹, as indicated in Figs. 2 and 4, which are pivotally supported upon a post *d* carried in the bed C and move therewith inwardly, to give a wiping movement over the upper, this movement being caused by the engagement of the outer ends of the plates with rollers *d*², *d*³ (Figs. 2 and 4) attached to a fixed part of the frame *c*¹; the result being that the plates, D, D¹ move from the position indicated in Fig. 2 to the position indicated in Fig. 4.

The Copeland structure is impracticable for the following, among other reasons:

(1). The forward movement of the shoe which causes the clamp B to engage the upper, so as to allow the upper to be pulled up by the pinchers and held in position, *will also move the slide forwardly, so that the wipers come in and close over the shoe prematurely, thereby preventing the use of the pinchers* (see the admission of defendant's expert Greene, I, 430).

(2). The only suggestion in the patent as to how the tack drivers EEE are to be made to reciprocate, rising and falling vertically, is (p. 2, lines 26-29) that they may be attached to "hinged blocks *e*¹". The legend "*e*¹", as seen

in Fig. 2, indicates the "folding plates" elsewhere denominated "D", which, according to defendant, are supposed to operate as wipers. *Thus, the patent says that the wipers operate to raise and lower the tack drivers*, which means that the wipers themselves rise and fall in a reciprocating movement, and when they rise, they must release the upper which they are supposed to be holding in position for the operation of the tackers.

(3). The "rod *d*", which is supposed to actuate the "hinged blocks *e*¹" (patent, p. 2, lines 29, 30) is mounted in a horizontally moving member C and therefore itself has a longitudinal motion. Yet the only means of reciprocating the "rod *d*" which the patent suggests is "a treadle when operated by foot power, and a cam or lever when operated by motive power". How a horizontally moving rod can be operated to reciprocate vertically by a treadle or cam or lever the patent leaves the reader to speculate, for the patent shows no such mechanism.

(4). The motion of Copeland's wipers, lettered D in the patent, is only a swinging movement. The rod *d* about which these elements are pivoted moves forward with the shoe, being mounted in a sliding member C which the shoe moves; so that there is no relative movement during the operation between the shoe and the wipers except the inwardly swinging movement of the wipers. Hence, there necessarily remains, as plainly shown in Fig. 4 of Copeland, a V-shaped portion of the upper, at the extreme end of the shoe, which receives *no wiping action whatever*; and this would be a fatal defect in the Copeland machine even if it were not hopelessly defective in many other respects. In the McFeely machine the wipers are given both a *bodily forward movement* and a swinging movement during operation,—a "bodily and swinging movement", as claim 6 in suit, describes it,—and thus all portions of the "lasting allowance" are properly "wiped".

The member *c*¹ of the Copeland patent, asserted by defendant (Br. pp. 23, 24) to be a means for adjusting the wipers, is merely *the frame of the machine* (patent, p. 2, lines 8-9).

In the Copeland apparatus, the extent to which the wipers close depends solely upon the extent to which the shoe is moved forward into the apparatus by the operator, as contrasted with the McFeely arrangement in which a power stroke of a definite fixed length is given to the wipers, whatever their original position, and in which the wipers (and with them the tackers) are primarily adjusted to an appropriate position depending upon the size of the shoe, in order to accommodate the machine to shoes of different sizes.

For all these reasons (and others which could be mentioned if it were necessary), the structure shown in the Copeland patent is not practical (McNulty, I, 464, Q. 87).

Such a patent teaches nothing but its own inoperativeness.

And the only true significance which the Copeland patent has is to show that as long as 60 years ago the need of an automatic laster was recognized. The patent is illustrative of the statement made by the Court of Appeals (Opinion I, 512) that

“The need for a machine of the type disclosed had long been recognized.”

SUPREME COURT OF THE UNITED STATES.

No. 332.—OCTOBER TERM, 1941.

The Williams Manufacturing Co., Petitioner, vs. United Shoe Machinery Corporation.	} On Writ of Certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.
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[May 25, 1942.]

Mr. Justice ROBERTS delivered the opinion of the Court.

The suit was for the infringement of Claims 6, 23, 42, 85, and 91 of the McFeely Patent No. 1,558,737 for improvements in automatic heel lasting machines: The District Court held the claims valid and infringed.¹ The Circuit Court of Appeals affirmed.²

The defendant sought certiorari on the ground that the claims were invalid under recent decisions of this court because they constituted attempts to repatent a broad combination of old devices,—bed lasters and automatic tackers—and embodied only aggregations of new unpatentable mechanisms with old mechanical combinations. In pressing us to grant the writ, the petitioner insisted that it desired no retrial of the facts but merely a proper application of the law to the facts found by the courts below. We granted the writ.

In the manufacture of shoes, after the upper, the lining, and the counter have been placed on a wooden last, and an insole has been tacked to the last, the protruding edges of the materials are flattened over the insole and tacked down at the toe and shank of the shoe. The next operation is "heel seat lasting", which consists of conforming the upper materials and insole snugly to the contour of the heel of the last and fastening them down with tacks. Originally this was done by hand. Later so-called "bed" machines were used which employed horizontally moving plates called "wipers" to flatten the projecting materials over the heel seat,

¹ 29 F. Supp. 1015.

² 121 F. 2d 273.

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where they were tacked by hand. Heel lasting on a bed machine involves the repeated use of levers and a foot treadle, and the result is not uniform.

March 2, 1915, McFeely obtained a patent for a machine which would automatically perform, in one power stroke, the wiping and tacking necessary to complete the process of heel seat lasting. In this patent he claimed numerous combinations of means to accomplish specific steps in the process, amongst others combinations to effect the clamping of the last, and positioning it during the process, and to operate the wipers and the tackers in proper relation to the last. A declared purpose was that the machine should be able to last the heels of shoes of different sizes. One machine was built in accordance with the patent and used for some time. It was found to work satisfactorily on shoes of a small range of sizes but not to work on shoes of a wide range of sizes as would be required in the operations of the ordinary factory.

October 27, 1925, McFeely obtained the patent involved in this case for improvements³ of the lasting machine described in his earlier patent. The improvements embodied in the claims in suit had to do with a new combination of elements for clamping the last in the machine, a new combination of elements for the operation of wipers and tackers in fixed relation to each other and to the heel of the last, and a new combination of means for positioning the last, vertically and automatically altering the position during the operation. A manual adjustment was a part of each of these combinations by which the heel clamping, the wiping and tacking, and the vertical positioning mechanisms could be adjusted in advance for different sizes of shoes. The respondent is the assignee of both McFeely patents.

The petitioner purchased from a German maker, and used, four machines which were found by the courts below to be exact copies of the respondent's commercial machines made under the patent in suit. So thorough was the imitation that even minor features not covered by the patent were copied. At the time of the trial alterations had been made in the petitioner's machines, but the courts below found that these were for the purpose of avoiding infringement and that they were not effective to that end.

³ "Any person who has invented or discovered any new and useful machine . . . or any new and useful improvements thereof . . . may . . . obtain a patent therefor." R. S. 4886, as amended, 35 U. S. C. § 31.

If the petitioner's statements in support of the application for certiorari are taken at face value, the point for decision is extremely narrow. In argument, however, the petitioner sought to overturn the concurrent findings below and to have us re-determine the question of the novelty and usefulness of the improvements described in the combination claims held valid and infringed.

The courts below have concurrently found that none of the earlier patents cited, including that of McFeely, embodied the combinations of the challenged claims covering means for clamping and holding the last, means for the movement of wipers and tackers in fixed relation to each other, and means for the timed vertical positioning of the last during the power stroke of the machine, each combination including means for manually adjusting the mechanism in advance for different sizes of shoes. These findings are to the effect that the new combinations, while they involve old mechanical constructions, combine these in a new way so as to produce an improved result. These are findings of fact,⁴ despite the petitioner's apparent contention to the contrary, and we will not disturb such concurrent findings where, as here, there is evidence to support them.⁵ The claim that the combinations are merely of old elements, which perform no new function and produce no new result, must be overruled.

We come to the petitioner's contention that the courts below have held the patent valid and infringed on the theory that the improvements and adjustments disclosed in the claims entitle McFeely to repatent the entire combination of the old devices, known as bed lasters and automatic tackers. Petitioner argues that they have so held only because the mechanism of the patented machine permits of its operation upon a wider range of sizes of shoes than the machine earlier patented and that it does so operate merely because of three trifling mechanical adjustments which it embodies.

The contention is not in accord with the holdings below. It is true that both courts found that manual adjustments are provided which are not found in the earlier McFeely patent or in the prior art as applied to the three combinations embodied in

⁴ *Battin v. Taggart*, 17 How. 74, 85; *Bischoff v. Wethered*, 9 Wall. 812, 814; *Thomson Spot Welder Co. v. Ford Motor Co.*, 265 U. S. 445, 446; *Stilz v. United States*, 269 U. S. 144, 147.

⁵ *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U. S. 405, 416, 422; *Adamson v. Gilliland*, 242 U. S. 350.

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the claims in suit. But the findings do not stop there. In respect of each claimed combination, both courts have found that they embody other improvements, in addition to mere manual preliminary adjustments and that each combination exhibits invention in that its elements cooperate in a new and useful way to accomplish an improved result.

The petitioner, however, contends that the breadth of the claims in suit is such that, instead of patenting the combinations claimed as improvements over the prior art, and restricting the claims to the improvements, the patentee sought to blanket every machine which combines the old bed laster with the equally old automatic tacking device. It is said that our decisions in *Basick v. Hollingshead*, 298 U. S. 415, and *Lincoln Engineering Co. v. Stewart-Warner Corp.*, 303 U. S. 545, forbid any such extension of the patent monopoly.

We think, however, that each of the claims is confined to a combination of specified means applicable only to a restricted portion and function of the whole machine. In stating his claims the patentee sometimes says "a machine of the class described having, in combination," . . . Obviously, no machine will infringe which does not have in combination the means specified in each of the claims for accomplishing the particular portion of the total operation covered by the claim. Other claims refer to "a lasting mechanism of the class described having, in combination,"

. . . The same comment is applicable. Other claims read: "In a machine of the class described, the combination" . . . Such preliminary statement is commonly and properly used to specify the type of machine in which the claimed subsidiary combination of elements works an improvement over the prior art.⁶ In describing the novel combinations embodied in the claims, it was necessary to make reference to certain portions of the machine in connection with which the new combinations were to operate and with which they were to dovetail,⁷ but, in mentioning these other mechanical parts, the claim does not purport to embody

⁶ Compare e. g. *Grier v. Wilt*, 120 U. S. 412, 420, 421; *Morley Machine Co. v. Lancaster*, 129 U. S. 263, 266; *Keystone Manufacturing Co. v. Adams*, 151 U. S. 139, 142; *Deering v. Winona Harvester Works*, 155 U. S. 286, 289, 290; *Boyd v. Janesville Hay Tool Co.*, 158 U. S. 260, 264; *Kokomo Fence Machine Co. v. Kitselman*, 189 U. S. 8, 10, 14; *Altoona Publix Theatres, Inc. v. American Tri-Ergon Corp.*, 294 U. S. 477, 482.

⁷ Compare *McCormick v. Talcott*, 20 How. 402, 404; *Loom Company v. Higgins*, 105 U. S. 580, 586.

them as elements of the claimed combination. To construe such a claim for a combination of new elements intended to be embodied in some well recognized mechanical aggregation, such as a sewing machine or a washing machine; as a claim covering all the mechanical details, or all the well known parts of the machine, would be to nullify every patent for an improvement in a type of machine long in use and would invalidate thousands of patents for improvements in standard machines. It would be difficult to describe an improvement in a washing machine without naming such a machine as the thing to which the patent is addressed and equally difficult to refrain from referring to various parts of the machine, such as the tub or the motor which actuates the washer. But it has never been thought that a claim limited to an improvement in some element of the machine is, by such reference, rendered bad as claiming a monopoly of tubs or motors used in washing machines.

Bassick v. Hollingshead, supra, and *Lincoln Engineering Co. v. Stewart-Warner Corp.; supra*, lend no support to the petitioner's argument. Those were suits for contributory infringement. In the *Bassick* case, the invention was of an improved pin fitting for receiving grease. The combination claimed was stated as a combination of a grease gun, a coupler, and a pin fitting of the improved type. It was sought to convict one who sold grease guns, common in the prior art, of contributory infringement because the seller knew, and intended, that the guns should be used with the improved pin fitting. The effort was to extend the monopoly embodied in the improved pin fitting so as to prevent sale or use of well known grease guns of the prior art, although whatever was novel in the improved pin fitting was peculiar to itself and had nothing to do with the grease gun commonly used in connection with all pin fittings. Had the claim merely recited that it applied to an improved type of pin fitting to be used in connection with grease guns and couplers, the claim for the pin fitting would have been good and would not have been rendered bad by the statement that the fitting was intended for use in connection with those other instrumentalities.

The *Lincoln Engineering* case went on the same principle.

The present suit for infringement is not for the use of an automatic bed lasting and tacking machine as such. It is for the use in such a machine of improvements of certain features of

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the machine. The respondent does not pretend to fix liability on the petitioner for contributory infringement by reason of the use of an automatic power driven lasting and tacking machine which does not employ the novel improvements of the combinations claimed, and could not do so. It is admitted, as it must be, that the petitioner is free to use the machine shown in the first McFeely patent which has expired, or any other automatic lasting and tacking machine which does not embody the three improvements covered by the claims in suit.⁸ It is not free, however, to use such a machine if it embodies any one of the three combinations embraced in those claims respectively. The use of these combinations is the basis of its liability for infringement.

The decree is

Affirmed.

⁸ *Seymour v. Osborne*, 11 Wall. 516, 541, 548.

A true copy.

Test:

Clerk, Supreme Court, U. S.

SUPREME COURT OF THE UNITED STATES.

No. 332.—OCTOBER TERM, 1941.

The Williams Manufacturing Com- pany, Petitioner, vs. United Shoe Machinery Corporation.	} On Writ of Certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.
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[May 25, 1942.]

Mr. Justice BLACK, dissenting, with whom Mr. Justice DOUGLAS
and Mr. Justice MURPHY concur.

I.

In 1873, Mr. Justice Bradley, speaking for this Court in *Carlton v. Bokee*, said: "We think it proper to reiterate our disapprobation of these ingenious attempts to expand a simple invention of a distinct device into an all-embracing claim, calculated by its wide generalizations and ambiguous language to discourage further invention in the same department of industry and to cover antecedent inventions. Without deciding that a repetition of substantially the same claim in different words will vitiate a patent, we hold that where a specification by ambiguity and a needless multiplication of nebulous claims is calculated to deceive and mislead the public, the patent is void." 17 Wall. 463, 471-472. I believe that the patent of which the five claims now held valid are a part embodies every one of the vices referred to by Mr. Justice Bradley and many more besides.

I recognize that the automatic power-driven heel seat laster, the machine to which these five claims relate, is a great technological achievement. But it is not the work of a single person, nor can it be attributed to any one generation. On the contrary, it represents the sum of gradual developments wrought by the skill, perseverance, and creative genius of countless persons throughout many centuries. To this finished machine contributions have been made by those who first harnessed steam, gas, and electricity to machinery as well as those who discovered and used in combination cams, pivots, pulleys, belts, latches, triggers, springs and spring latches, brakes and brake blocks.

The exact date of the first use of machines in the manufacture of shoes is not known. But we know that in 1790, Thomas Saint secured a patent in England on a machine for the fastening of soles to uppers; and that in 1810, M. I. Brunel secured a patent in this country on a machine to perform the same function. The progress of the art for the next fifty years culminated in the stitching machine jointly patented by Blake and McKay in 1860. By 1876 this and subsequent McKay shoe machines were earning more than a half million dollars in annual patent royalties for him, and had given him the dominant position in the industry. During this period another current of invention produced the cable nailing machine which cut nails and drove them automatically. And in 1883, Jan Ernst Matzeliger invented and patented a machine which "could simultaneously and in a minute's time hold the last in place to receive the leather; move it forward step by step so that the other coaching parts might draw the leather over the heel; properly punch and grip the upper and draw it down over the last; lay the leather properly at the heel and toe; feed the nails and hold them in position for driving; and then discharge the completed shoe from the machine."¹ The foregoing inventions and numerous others patented and put into use by the close of the century completely transformed the nature of shoe manufacturing. Reviewing these and other developments, the United States Census Report of 1900 concluded that "the genius of the American inventor had provided for every detail of shoe-making, even the smallest processes being performed by mechanical devices of some kind."²

The United Shoe Machinery Company was formed in 1899. It combined in one enterprise the more important companies in the shoe machinery industry at the time, and brought under unified control the multitude of patents which those companies owned. Since that time the United Shoe Machinery Company or its parent,

¹ Dictionary of American Biography, "Matzeliger, Jan Ernst."

² Census Reports (12th Census, 1900), Vol. IX, part III, 756. On the development of the shoe machinery industry, see Gannon, *Shoe Making*, *passim*, and his article "Shoe Industry in the United States" in *Encyclopedia Americana*; Hazard, *Organization of Boot and Shoe Industry in Massachusetts before 1875*, *passim*; Kaempffert, *A Popular History of American Invention*, Vol. II, 404-434; Dictionary of American Biography, "Goodyear, Charles [jr.]", "McKay, Gordon", "Matzeliger, Jan Ernst". "Winslow, Sidney Wilmot"; *Encyclopaedia of the Social Sciences*, "Leather Industries", *e.g.*, 307-309.

the United Shoe Machinery Corporation, which is the respondent in this case, has continuously and overwhelmingly dominated the industry. The shoe machinery patents which the respondent had acquired by 1918 were recognized by this Court to be "too great in number for explanation or enumeration." *United States v. United Shoe Mach. Co.*, 247 U. S. 32, 40. In 1920, the Federal District Court for the Eastern District of Missouri found that the respondent controlled, through its system of leasing, at least 95% of all the shoe machinery used in the United States. See *United Shoe Mach. Co. v. United States*, 258 U. S. 451, 455.

The narrow field into which the patent in controversy was projected had already been so crowded by prior patents, a multitude of which were owned by the respondent, that the area left for patentable invention was very small. As the brief treatment in the Court's opinion indicates; the inventions set out in the claims now held valid, if inventions at all, are comparatively simple improvements of an automatic power-driven heel seat lasting machine.

The work of a heel seat lasting machine is to bend and flatten out the overlapping part of the shoe upper over the insole and then tack it down so that it will be ready for attaching the heel. In the performance of these operations the incompleated shoe is firmly held by a clasping device in a proper position to permit the leather to be bent and flattened by "wipers" and fastened to the insole by "tackers."

It is to the clasping device, the wipers, and the tackers that the asserted improvements relate. The operation of these parts must be carefully coordinated, and the coordination must be maintained when the machine is adjusted for different sizes of shoes. Means to accomplish the necessary coordination over a range of different sizes had been claimed in a prior patent³ which like the patent in suit was issued to Ronald F. McFeely and assigned to the respondent. The courts below found and the respondent here argues that although the machine made in accordance with the first McFeely patent "successfully lasted shoes of specific sizes, it proved incapable of operating satisfactorily upon a range of sizes large enough to adopt it for commercial operation in the ordinary shoe factory." 121 F. 2d 273, 278.

³ Claim No. 167, for example, of the earlier McFeely patent (No. 1,129,881) sets out "means to adjust the back stop for shoes of different sizes including provision for indicating the correct adjustment for particular sizes."

The improvements said to cure the deficiencies in the earlier machine are covered in the five claims here held valid. Insofar as these claims set out anything not contained in the first McFeely patent, the modifications are not at all complex. The tackers and wipers, formerly connected in a manner which permitted some slight independence of movement, were now rigidly interconnected so that one could not move without the other; and a handle was substituted for a screw nut as a means of making a preliminary manual adjustment for shoes of different sizes. Changes of equal simplicity were made in the "hold-down" and the "heel band", two of the parts which clasp the shoe and hold it in place during the actual lasting process.

There is no doubt that the United Shoe Machinery Corporation, particularly since it maintains a patent department in which patent lawyer are regularly employed, could have caused these simple improvements to be patented separately and without ambiguity or prolixity. No possible justification can be offered for inextricably combining the description of the alleged improvements with a description of a complete lasting machine. Let us now turn to the patent in suit to see how far it meets the requirement of R. S. § 4888, 35 U. S. C. § 33, that a patentee "shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery."

The patent as a whole sets out 137 claims covering 16 large closely printed pages; it includes 11½ more pages of specifications and numerous drawings; it has a text of more than 25,000 words, about 14,000 of which are devoted to the claims. Remarks of Judge Learned Hand, made with respect to a patent much shorter than the one before us, are pertinent here: "Such claims violate the very purpose of any claims at all, which is to define the forbidden field. In such a waste of abstract verbiage . . . it takes the scholastic ingenuity of a St. Thomas with the patience of a yogi to decipher their meaning as they stand." *Victor Talking Mach. Co. v. Thomas A. Edison, Inc.*, 229 Fed. 999, 1001. Alexander Graham Bell's basic patent on the telephone, a pioneer invention,⁴ affords an illuminating contrast. All of Bell's claims—he found five ample—contain in the aggregate 229 words, less than many single claims of this patent; and the entire text of his patent is

⁴ See *Westinghouse v. Boyden Power Brake Co.*, 170 U. S. 537, 561-562.

about one-tenth the length of this one.⁵ The second McFeely patent, unlike Bell's, discloses no pioneer invention. On the contrary McFeely stated in his application that he was seeking to patent improvements. Yet, the features of a heel seat laster are set out so comprehensively and in such detail that a trained person would be able to build a complete machine with only his improvement patent as his primary source of information.

If the machine ~~as a~~ whole were being claimed in the second McFeely, arguments of some plausibility could perhaps be made to justify the length of the patent. For the automatic heel seat laster in its entirety is a highly complex machine combining a number of interrelated mechanisms in a manner which as the court below pointed out enables it to perform its intricate function "in the fraction of a second and too swiftly for the eye to follow." 121 F. 2d 273, 274. But we must not allow ourselves to confuse the old and the new. The impressive speed of the machine is not the result of the improvements. Like most of the other admirable qualities of the machine as a whole it was attainable before the improvements were patented and to it the improvements made no contribution.

Even if there is some conceivable basis for crediting the machine as a whole to McFeely's genius, he was not entitled to claim it in this patent. For his earlier patent, even lengthier than this one, had described and claimed as patentable invention every feature of the machine except the minor improvements to which we have referred.

One who invents improvements on a prior invention, whether his own or someone else's, may patent the improvements separately. But I do not believe that our patent system was intended to allow the indiscriminate jumbling of the new and the old which would permit the inventor of improvements to extend his domain of monopoly by perpetuating rights in old inventions beyond the 17 years period Congress has provided.

If we turn from the patent as a whole to the individual claims we find in many of them the same ground for criticism: the introduction of something new is taken as an occasion for reclaiming the old. Claim 42, one of the five claims held valid and infringed, is illustrative. In these proceedings, the respondent makes this claim the basis of his assertion that the second McFeely embodies

⁵ Telephone Cases, 126 U. S. 1, 4-14.

a patentable improvement in the hold-down mechanism, the part of the machine which holds the shoe in the appropriate vertical position during the lasting operation. But there is no clear and distinct statement in Claim 42 so limiting its scope. On the contrary, the trial court referred to this claim as "a general claim covering the machine based on the McFeely patent in suit", and the language of the claim itself purports to cover a "machine of the class described."⁶

Not only does 42 claim many old elements, but they are claimed in the same manner and with the same emphasis as the hold-down mechanism. Included among these old elements are: "clamping means to embrace one end of a last and shoe"; "end wipers positioned to operate on the edges of the upper at the said end of the shoe"; "a support for a last and shoe constructed and arranged for manually effected movement to engage the last and shoe with [the] clamping means and hold-down"; and "mechanism operative to actuate the wipers to break down the edge of the upper over the bottom of the positioned last and shoe". All of these old elements were to operate in exactly the same manner prescribed either in the first McFeely or other prior patents and they were to perform the same functions they had always performed.

We have held that if a claim does not contain a distinct and specific statement of what the patentee claims to be new, it is void. *Gen. Electric Co. v. Wabash Co.*, 304 U. S. 364. And we have also held void a claim which sets out an improvement of one

⁶ Claim 42 provides: "A machine of the class described having, in combination, clamping means to embrace one end of a last and shoe, end wipers positioned to operate on the edges of the upper at said end of the shoe, a hold-down mounted for vertical movement and positioned to engage the bottom of the last and shoe, a support for a last and shoe constructed and arranged for manually effected movement to engage the last and shoe with said clamping means and hold-down, power operated mechanism effective to move said support forcibly to press the last and shoe against said clamping means and hold-down and to actuate the clamping means, mechanism effective in timed relation to the clamping means to depress the hold-down and support to position the shoe bottom determinately below the plane of the wipers, mechanism operative to actuate the wipers to break down the edge of the upper over the bottom of the positioned last and shoe, the said hold-down mechanism being automatically operative subsequently determinately to raise the hold-down, the said power operated mechanism being operative substantially coincidently correspondingly to raise the said support to engage the bottom of the last and shoe with said hold-down with the shoe bottom positioned substantially in the plane of the wipers, and the end wiper mechanism being subsequently operative in timed relation to wipe over and compact the broken down edge of the upper over the bottom of the last and shoe, and manually adjustable means for determinately varying the amount of vertical movement of the hold-down."

part of an old combination but at the same time purports to cover the improvement in combination with old parts which perform no new function. *Lincoln Co. v. Stewart-Warner Corp.*, 303 U. S. 545. Claim 42, today held valid, clearly violates both of these standards.

I believe it could be conclusively shown that almost all of the 137 claims are objectionable for one or both of the same reasons as Claim 42. But the unnecessary length of this patent makes it impracticable to present a complete exposition of the vices of each separate claim in a judicial opinion. It may be possible, however, to suggest in a few brief statements the extent of the deficiencies and their cumulative tendency "to deceive and mislead the public" with respect to the scope of the patent. *Carlton v. Bokee, supra*, 472.

Of the 137 claims, 68 purport to cover in unambiguous language either "a machine of the class described" or "a lasting machine" or "a heel seat lasting mechanism" without any hint of limitation to a claimed improvement. The use of such broad language cannot be dismissed as an inconsequential matter of form, since in substance these claims embrace with varying degrees of comprehensiveness all the fundamental features of an automatic power driven heel seat laster.⁷

All but one⁸ of the remaining 79 claims are introduced by the somewhat limiting phase "in a machine of the class described." But in almost all of these the introduction is followed by a recital of old elements claimed in the same manner as they were in the

⁷ Claim 55 is illustrative. It provides: "A heel seat lasting machine having, in combination, clamping means to embrace the heel end of a shoe, wipers to operate upon the upstanding edges of the upper at the clamped end of the shoe, means to support a last and shoe in inverted position, means to raise said support to position the last and shoe for co-operation with the clamping means with the bottom of the shoe above the operating plane of the wipers, means to operate the clamping means to embrace the heel end of the positioned shoe, mechanism operative determinately to depress said last and shoe support relatively to the clamping means to upwipe the upper over the sides of the last and to position the shoe with its bottom in a plane determinately below the operating plane of the wipers with the upper edges in said operating plane, and means subsequently to operate said wipers in timed relation to the shoe support to break down the upstanding edges of the upper over the heel seat, said support operating mechanism being subsequently effective in timed relation determinately to raise said support and shoe to position the shoe bottom in the operating plane of the wipers, and said wiper operating means being subsequently effective in timed relation to operate the wipers to wipe down and compact over the heel seat the broken down edges of the upper."

⁸ Claim 39 purports to cover "an end lasting mechanism", but it, too, attempts to reclaim various old elements.

earlier McFeely⁹ and here again the aggregate effect is to reclaim a heel seat lasting machine in its entirety.

Recent studies conducted by the Temporary National Economic Committee show that the technique employed in the second McFeely patent is not unusual.¹⁰ In essence, it is an attempt to utilize minor improvements to perpetuate exclusive enjoyment of a major instrument of production which rightfully belongs to the public. Distinct separation of the new would afford guidance to those who wished to use the old when the exclusive rights to it expired. On the other hand, blurring the lines of separation places anyone who attempts to use any part of the amalgam in jeopardy of burdensome infringement suits. Where the patent owner has ample resources to bear the costs of repeated litigation, the power of the infringement suit to stifle competition is increased. And where potential competitors are weak and few, it may afford a practically complete protection for the preservation of undeserved monopoly.

⁹Claim 84 is illustrative. It provides: "In a machine of the class described, the combination with fast and shoe positioning means, of end embracing wipers, operating means for said wipers including parts movable to effect a preliminary adjustment of the wipers to the contour of the shoe while other portions of said operating means are stationary, and tackers movable inwardly over the shoe and connected to said wipers for preliminary adjustment with them."

¹⁰ *E. g.*, a "Memorandum of Policy" from the files of an industrial corporation, set out in the TNEC Hearings, contains the following guidance for the corporation's patent division:

"Continuing the Monopoly by Us or Others

"It often happens that if minor improvements are protected by patents, machines and processes licensed under the original basic patents are given a much longer earning life by the fact that the minor improvements continue the protection on the machines, and even when the basic patents expire, others are prevented from using the latest commercial form of the machine.

"Example: The . . . basic patents expired several years ago. Nobody, however, dare use the present type of . . . machine because of improvements covered by minor patents. Likewise, if the original patent protection obtained on particular machines should not be sustained by the Courts, yet a second line of defense patents covering details and improvements may become a most valuable asset.

"It has always been our ambition to obtain patents which will be related to furnace, melting and refining, feeding, delivery, forming, automatic handling, carrying, stacking and annealing. Conceivably we might lose patent domination of one or more important links, but still retain practical control of the whole chain by means of controlling the most efficient form of the other links."

TNEC Hearings, 777-778.

Cf. TNEC Monograph No. 31, 160: "A patent provides a sanction but it is about to expire—by some means or other its life must be prolonged. An improvement alone is hardly enough; its importance must be magnified until the line between invention and improvement is completely blurred. A multiplication of improvements is far better; it creates at least an appearance that an industrial art is being transformed."

The circumstances here are most favorable for the use of patent privileges as a deterrent to all competition. By its vagueness and generality, the patent in suit creates an overhanging threat to anyone who might want to produce any kind of heel seat lasting machinery. And this threat is intensified by the universal recognition of the patent owner's long established rule over the entire shoe machinery industry.

Moreover, it is entirely unrealistic to judge this patent in isolation. It is a stage of a process which the record shows began years before and is still continuing, a process by which it appears possible for the respondent to make the monopoly endless. The first McFeely patent, assigned to the Respondent, embraced the whole universe of prior development in heel seat lasting machines. About a year after it was issued the United Shoe Machinery Company became the owner of another patent on a lasting machine, Brock No. 1,188,616. The 77 claims of this patent reembody too many of the features previously covered by the first McFeely to allow enumeration here. Four years later, Pym No. 1,368,968, also on a lasting machine, was issued and assigned to the respondent. Of the 172 claims of this patent there is another multitude embodying identical features of the first McFeely. Although applied for about a year after the first McFeely, the patent in suit was not issued until 1925, four years after the Pym patent. The second McFeely appears to be only the currently used weapon; the record reveals another in the respondent's arsenal, awaiting service when this one is no longer useful.¹¹ To date the series of overlapping patents has been continuous. There is no reason to suppose that abandonment of so successful a practice is contemplated for the future.

The discouragement to future invention and the potentialities of deceiving and misleading the public which this Court condemned 70 years ago are here present in fullest measure. *Carlton v. Bokee*, *supra*. Opposed to departure from the salutary rule announced by Mr. Justice Bradley, I believe the patent before us should be declared void.

¹¹ Jorgensen No. 1,852,015, issued in 1932 and assigned to the respondent, purports to cover improvements on a machine for shaping shoe uppers "over lasts or other forms." It states that the invention "is herein illustrated as embodied in a machine for lasting the heel ends of shoes, but it is to be understood that in its more general aspects it is not limited to heel-end-lasting machines."

II.

In addition to the foregoing reasons for declaring the entire patent void, there is an independent narrower ground for reversing the decision below. The five claims here relied upon set out only an aggregation of old elements not constituting patentable invention.¹² And where as here an appellate court can determine from a mere construction and comparison of patents that an alleged new invention is in reality identical with inventions claimed in prior patents, the question of patentability should be reviewed. *Heald v. Rice*, 104 U. S. 737, 749. Cf. *Singer Company v. Cramier*, 192 U. S. 265, 275.

It was the view of both courts below that although a machine manufactured under McFeely's earlier patent had "successfully lasted shoes of specific sizes, it proved incapable of operating satisfactorily upon a range of sizes large enough to adapt it for commercial operation in the ordinary shoe factory." The five claims in suit relate to three small adjustments of the first McFeely machine intended to cure this alleged deficiency. The respondent now here asserts that the adjustments were intended to accomplish any other purpose or that in fact they did. Nor did the courts below rest their conclusions upon findings that any other purpose was accomplished. They found novelty and usefulness in the increased adaptability of the later machines over a wider range of sizes; and in the minor mechanical changes made to cure the shortcomings of the earlier machine, they found patentable invention.

But novelty and usefulness are not enough, for to be patentable, improvements "must, under the Constitution and the statute, amount to an invention or discovery." *Thompson v. Boisselier*, 114 U. S. 1, 11. And even though improvements produce "a more convenient and economical mechanism", or a "more convenient and more salable" product, or a machine of "greater precision", they are not patentable if they "sprang naturally from the expected skill of the maker's calling."¹³ As this Court said

¹² The petitioner's application for certiorari clearly raises this issue. One of the reasons we brought the case here was the opportunity it would afford to consider the petitioner's contention that the second McFeely "merely aggregates old adjusting features with an old combination . . . in conflict with the principles applied in such cases as *Grinnell v. Johnson Co.*, 247 U. S. 426."

¹³ *Grinnell Washing Mach. Co. v. Johnson Co.*, 247 U. S. 426, 434; *Specialty Manfg. Co. v. Fenton Manfg. Co.*, 174 U. S. 492, 498; *Altoona Theatres v. Tri-Ergon Corp.*, 294 U. S. 477, 486; *Am. Road Mach. Co. v. Pennock & Co.*, 164 U. S. 26, 41.

in 1875, "Perfection of workmanship, however much it may increase the convenience, extend the use, or diminish expense, is not patentable." *Reckendorfer v. Faber*, 92 U. S. 347, 356-357. Cf. *Cuno Corp. v. Automatic Devices Corp.*, 314 U. S. 84, 90-92.

A comparison of the patent in suit with patents of the past shows that the improvements here were but duplications of old elements to obtain an old result and their application to the first McFeely machine was no more than a common mechanical expedient. The objective, adapting the machine to shoes of different sizes, suggests its own means of accomplishment.

Even before 1900, automatic tacking machines and automatic wiping machines, adaptable to shoes of different sizes, had been in use commercially. In connection with the issuance of his earlier patent, McFeely represented that he had succeeded in combining tackers and wipers in a single machine and that his patent therefore set out a pioneer invention, disclosing the first machine organized for the entire process of heel seat lasting. The United Shoe Machinery Company built a machine in accordance with the patent and placed it in a factory for testing purposes. Shoes lasted on it were sold to the factory owner's regular shoe trade. McFeely had described in detail means to set the parts before the lasting operation began so that the machine would properly do its work whatever the size of the shoe.¹⁴ It is said the tests revealed that these preliminary adjustment devices were not adequate to accommodate all sizes although they did permit the machine to function satisfactorily on some.

The problem was to enable the operator in advance to enlarge or diminish the area within which the tackers, wipers, and shoe clasp devices would do their work as the shoe to be lasted might be larger or smaller. The most obvious answer was adjustments to permit appropriate positioning of the parts. Three separate hand adjustments were therefore provided to set the tacker-wiper combination, the heel clasp device, and the hold-down

¹⁴ The following excerpt from the specifications of the earlier McFeely is illustrative: "In Fig. 18 the back stop is shown as formed on a rack bar adjustable by a shaft 690 having a handle at the side of the machine with a pawl in it to engage a locking ratchet 691 having marked on it graduations indicating the proper adjustment for different sizes. The ratchet can be adjusted to position the graduations for different groups of sizes such as men's, women's or children's sizes." And the first claim sets out "means for fixing the gripper in different positions of adjustment both vertically and horizontally relatively to the last spindle for lasts of different heights and lengths."

mechanism. The adjustments were so arranged that the operator of the machine could either by use of a set screw or handle place these separate parts in appropriate positions for the particular size of shoe to be lasted. The positions set by the operator are maintained until reset for shoes of another size.

Technological knowledge and development had advanced too far by 1916 to warrant elevation of such hand adjustments to the privileged position reserved for inventions. Either in or out of the combination these adjustments performed no more than the old functions that adjustments by hand levers and set screws had always performed. Yet without these hand adjustments the problem alleged to have been revealed by operation of the first McFeely machine would not have been met. For hand adjustments were the indispensable elements of the claimed improvements. Since I believe that such adjustments should not be raised to the dignity of patentable invention, I think the five claims should be held invalid.

No argument is made that the remaining elements standing alone would have caused the machine to function satisfactorily on shoes of all sizes. Nevertheless, I shall give the reasons for my belief that there is not patentable invention in the remaining elements of the five claims.

Tacker-Wiper Connection. In the first machine, the tackers and wipers were loosely connected in a manner allowing a slight independence of movement. Demonstration of the machine indicated that more satisfactory results would be obtained if tackers and wipers maintained a fixed relationship to each other throughout all the movements of the lasting operation. Here again the problem suggested its own answer. It is difficult to imagine that any mechanic would be ignorant of the principle that if two parts are fastened together, they will move simultaneously. The change in the tacker-wiper mechanism was no more than the application of this principle. Tackers and wipers were more rigidly interconnected. Even if such an expedient could ever have been invention, it had been anticipated in the field of shoe machinery as far back as 1881, when George W. Copeland, Matthias Brock, and Joseph E. Crisp obtained Patent No. 244,714 on an automatic power-driven lasting machine which claimed a combination of wiper plates and fasteners to be moved simultaneously to the proper position for wiping and fastening the sole. I can see no evidence whatever

of an exercise of the inventive faculty in the fastening of tackers and wipers rigidly together so as to cause them to move simultaneously and maintain a fixed relationship with each other.

Heel Band and Hold-Down. The first McFeely, as had many prior patents, described a U-shaped leather heel band adapted to grip and hold the shoe while it was wiped and tacked. It is asserted that the patent in suit added attachments which permit the heel band to slide relative to its supports. The first McFeely also described a hold-down device for maintaining the shoe in appropriate vertical position for the lasting operations. It is asserted that the claim of the second McFeely which provides for the hold-down mechanism modifies the first by introducing a new "sequence of operations." The asserted modifications of both heel band and hold-down are claimed in conjunction with the hand adjustments previously discussed.

Since the beginning of shoe lasting, it has been recognized that the shoe must be held firmly in the proper position for wiping and tacking. Heel bands and hold-downs similar to those claimed here appear in the record in numerous drawings, specifications, and claims of a long series of patents prior to the one before us. The great number of patents, embodying apparently limitless variations of the same basic principles, suggests that the public had before McFeely's second patent already paid in fullest measure for heel bands and hold-downs.

Examination of only three of these patents—Plant No. 958,280 (1910), Keyes No. 1,023,854 (1912), and Brock No. 1,188,616 (1916)—is enough to show complete anticipation of the entire principle of the sliding heel band capable of forward and backward movement if not every essential mechanical detail.

• The general claim of the second McFeely which sets out the hold-down mechanism is said to provide for a "particular sequence" of operations. Insofar as the ambiguities of this claim¹⁵ permit such a deduction, there is nevertheless a failure to disclose any patentable invention. Of course, the sequence of operations in which the hold-down plays a crucial part is important. For the shoe must be maintained in such a vertical position that the successive strokes of the wipers will perform their proper function. If the shoe is too low with respect to the wipers, the leather will not be bent

¹⁵ See discussion of the invalidity of this claim (No. 42) at pp. 5-6, *supra*.

down sufficiently far; if the shoe is too high with respect to the wipers, the wipers will hit the shoe below the insole and therefore will not produce any bending of the leather at all. But in setting out a mechanism to insure the proper relationship between the level of the shoe and the level of the wipers during successive strokes of the machine, the second McFeely patent is by no means new. Claim 49 of the first McFeely patent includes a "provision for changing relatively the plane of action of the wipers and the position of the shoe between successive actuations of the wipers." And in Claim 164 of the first McFeely it appears that the hold-down mechanism was recognized as having a major role in accomplishing this purpose. For Claim 164 specifically provides "means for automatically actuating the hold down upwardly and then downwardly again between the initial advance of the wiper and a final retraction of the wiper." If the "sequence" of the second McFeely is any different, the difference cannot be seen in the provisions of the claim relied upon, nor is it explained in the record; if, as I believe, the "sequence" in both patents is the same, the second is invalid because anticipated.

In short, this record shows that the old elements composing the asserted improvements here had been described and redescribed, claimed and reclaimed as patentable inventions. The respondent has used every one of them in previous patents now expired. It should not be allowed to continue its exclusive control over their use and enjoyment.

There is perhaps another possible ground for concluding that the five claims set out patentable invention. Conceivably the three asserted improvements, although each separately is no more than a mechanical expedient or a simple adaptation of prior invention, could be accepted in combination as an exercise of the inventive faculty. The court below apparently did evaluate the improvements in combination, for it found that taken together, they resulted in a "new unitary mode of operation of the entire machine." 121 F. 2d 273, 278. But the statement is unexplained, and I cannot find support for it in the record. On the contrary, comparison of the first and second McFeely patents shows that the basic mode of operation of the entire machine in both was identical. In the earlier machine, the shoe was placed on a last at the end of a jack, firmly held in position while the wiping and tacking took place, and then released. In these fundamental respects, the mode of operation

provided for in the second McFeely patent is the same, whatever modifications McFeely may have added for the purpose of increasing adaptability to different sizes of shoes not having affected it in the slightest.

In any event, "each claim must stand or fall, as itself sufficiently defining invention, independently of the others." *Altoona Theatres v. Tri-Ergon Corp.*, 294 U. S. 477, 487. None of the five claims here in suit discloses a "new unitary mode of operation of the entire machine." Even if it were possible to deduce from the five claims taken together that McFeely had made such a disclosure, nevertheless the patent ought not to be treated as if the disclosure had actually been made in appropriate form. For the creation of a sixth claim, a combination of the other five, which McFeely himself failed to include in his patent would entail a kind of constructive patenting procedure for which there is no judicial or statutory precedent.

The courts below concluded that the five claims in suit embodied patentable invention. In reaching this conclusion, which I believe is overwhelmingly refuted by examination of the claims themselves against the background of prior developments in the art, heavy reliance was placed on two extrinsic considerations: commercial success and the presumption of validity arising from the fact of issuance of a patent by the Patent Office.

Commercial Success. When it is a close question whether the changes embodied in a later patent are a sufficient advance over earlier patents to constitute patentable invention, the measure of commercial success of the later patent has been recognized by courts as affording some aid in reaching a conclusion. But while commercial success has been said to have relevance in resolving doubts, *Smith v. Hall*, 301 U. S. 216, 233, it cannot transform an exercise of the common skill of a calling or an adaptation readily suggested by experience with prior inventions or an aggregation of familiar mechanical expedients into patentable invention. Cf. *Hildreth v. Mastoras*, 257 U. S. 27, 34. And where the patent in question reembodies a prior patent not yet expired, its commercial success does quite the reverse of establishing patentability; it establishes the seriousness of the infringement. If the reembodied prior patent has expired, or if it is owned by the owner of the later patent, commercial success is one index of success in appropriating what should have been available to the public or in extending special privileges beyond the legally permitted term.

I have already given the reasons which convince me that no patentable invention is set out in the five claims in suit. The force of none of those reasons is affected by the commercial success which the respondent has realized. After examining the record, I can find no serious doubts to be resolved. All I can deduce from the commercial success of the respondent with these machines is the magnitude of the consequences to the public who have had to pay for the respondent's extension of an undeserved monopoly through the use of an invalid patent.

Even if the issue of patentable invention were a doubtful one, the force of deductions that might normally be drawn from commercial success is greatly reduced in the circumstances of this case. For, by virtue of its dominant position in the shoe machinery industry, the United Shoe Machinery Corporation was not seriously threatened by loss of business to competitors when it withdrew the first McFeely machine from commercial use. Because there was no compelling economic incentive to hasten the commercial adaptation of the first McFeely machine, the inferences to be made from its withdrawal are extremely weak. Controlling the shoe machinery business to the extent that it did, the respondent was able to accelerate or delay the commercial exploitation of its heel seat lasting machine at its pleasure.

Moreover, the record indicates that the commercial success relied upon by the courts below would be inconclusive with respect to the second McFeely patent under any circumstances. For there is uncontroverted testimony that of the 1250 later machines in commercial use only 12 were built in accordance with the disclosures of the second McFeely patent. The remainder embody features set out in a subsequent patent, Jorgensen No. 1,852,015, or a prior patent, Hoyt No. 1,508,394, (declared invalid by the court below) or both. Since I believe that the commercial success of the respondent's machine could in no event establish the validity of the five claims in suit, I do not find it necessary to determine how much of the commercial success of the respondent's machines is to be attributed to features not set out in the second McFeely patent. Such a determination does not appear to have been made in the entire course of proceedings in this case.

Presumption of validity arising from issuance. Quoting from the opinion of this Court in *Radio Corp. v. Radio Laboratories*, 293 U. S. 1, 8, the court below stated that the present case

obliged it "to give consideration to the rule that 'one otherwise an infringer who assails the validity of a patent fair upon its face bears a heavy burden of persuasion, and fails unless his evidence has more than a dubious preponderance.' " 121 F. 2d 273, 277. For reasons I have already set out I can agree neither that the second McFeely is "a patent fair upon its face" nor that the evidence of non-patentability has no more than a "dubious preponderance." Hence, the prerequisites for establishing a presumption of validity are not here present. In the absence of a statutory prescription to the contrary, I see no reason for extending the presumption of validity arising from the mere issuance of a patent beyond the narrow compass indicated by the passage quoted from the *Radio Corporation case*.

On the other hand, there are many positive reasons for not doing so. A patent is a grant of exclusive privilege. Yet it is normally issued in a non-adversary proceeding. Indeed, it is the practice of the Patent Office to keep patent applications on file in secrecy until the time of issuance.¹⁶ The public, who will be excluded for 17 years from the field granted to the applicant, are represented only insofar as the enormous volume of business permits the examining staff of the Patent Office to watch out for the public interest.¹⁷ Moreover, the patent examiner, unlike the court in an infringement suit, does not have the benefit of the researches of opposing counsel upon the state of the prior art. Even where the Patent Office conducts interference proceedings for the purpose of determining priority of invention, a contestant is not permitted to prove that a stranger to the proceedings was the first inventor. He can oppose only his own claim of priority against that of the other party: See *Loftin v. Smith*, 126 F. 2d 514, 515.

Whatever the small weight to be given to the presumption arising from issuance of a patent, it is here overcome by the special circumstance of this case. For the patent in suit like the prior one on which it is asserted to have made improvements was issued to the same patentee and assigned to the same owner. In this kind of situation, the burden of establishing the validity of the second patent is increased, this Court having said that in this "class of cases it must distinctly appear that the invention covered by the later patent was a separate invention, distinctly dif-

¹⁶ Rule No. 15, Rules of Practice, United States Patent Office.

¹⁷ See Report of Science Advisory Board, set out in TNEC Hearings, Part 3, 1139, 1140.

ferent and independent from that covered by the first patent." *Müller v. Eagle Manufacturing Co.*, 151 U. S. 186, 198. At very best, the presumption of validity arising from the mere issuance of a patent might be permitted to tip the scale when other considerations leave the issue of patentability in equilibrium. In the present case, I believe that the emphasis of the court below on this presumption was entirely misplaced.

As I view this patent its total impact is appalling. Out of its great bulk, the respondent is able to assert only three simple improvements embraced in five claims. And on examination, it appears that these improvements fall far below the established requirements of patentable invention. Yet by its terms the patent as a whole purports to appropriate for exclusive use, not merely these improvements, but a major instrument of production in its entirety. Furthermore, this patent is one of a group which seems to have an interminable capacity for self-perpetuation. If judicial approval is to be given to patents of this kind; the public benefits which might reasonably be hoped for under the constitutional provisions and the federal statutes relating to patents can never be attained.